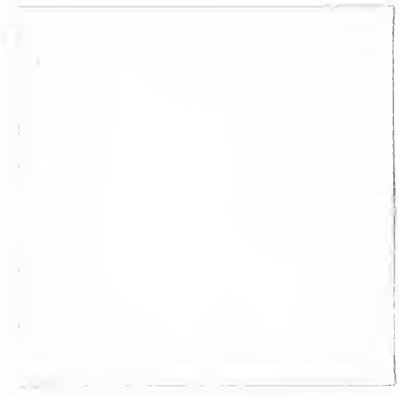


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THE ARCHITECTURAL RECORD

AN ILLUSTRATED MONTHLY MAGAZINE OF ARCHITECTURE
AND THE ALLIED ARTS AND CRAFTS.

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JULY—DECEMBER

1919

PUBLISHED BY

THE ARCHITECTURAL RECORD CO.

115-119 WEST FORTIETH STREET, NEW YORK CITY
841 MONADNOCK BUILDING, CHICAGO
1821 CHESTNUT ST., PHILADELPHIA
BESSEMER BUILDING, PITTSBURGH
114 FEDERAL STREET, BOSTON

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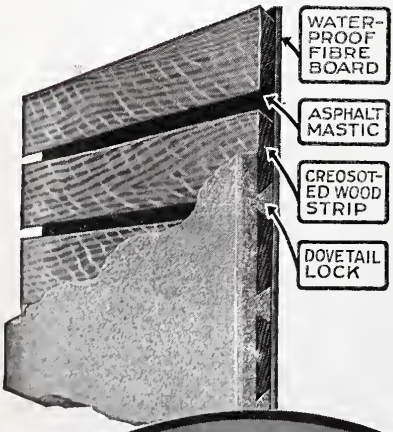


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Business Manager: J. A. OAKLEY

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Yearly Subscription—United States $3.00—*Foreign* $4.00—*Single copies* 35 *cents. Entered May* 22, 1902, *as Second Class Matter, at New York, N. Y. Member Audit Bureau of Circulation.*

PUBLISHED MONTHLY BY
THE ARCHITECTURAL RECORD COMPANY
115-119 WEST FORTIETH STREET, NEW YORK

F. T. MILLER, Pres. W. D. HADSELL, Vice-Pres. J. W. FRANK, Sec'y-Treas. E. S. DODGE, Vice-Pres



ENTRANCE GATE—RESIDENCE OF A. STEWART WALKER, ESQ., NEW YORK.
WALKER & GILLETTE, ARCHITECTS.

THE ARCHITECTVRAL RECORD

VOLVME XLVI NVMBER I

JULY, 1919

The RESIDENCE of A. STEWART WALKER, Esq. NEW YORK: Walker & Gillette, Architects

By John Taylor Boyd, Jr

PERSONALITY is an essential quality in the architecture of houses. There is some basis for the claim of those who decry originality in the monumental architecture of public buildings on the argument that its character has been crystallized by the experience of ages. But surely our homes should not all be alike. We cannot, in their case, make a fetish of standardization or of current fashions and, at the same time, hope to attain any real atmosphere of art, which is the aim of every good designer.

It is the declared purpose of modern housework to avoid both stereotyped arrangements and ephemeral fashions. But the performance too often fails. Formula and unreasoned imitation are everywhere too apparent. As good design spreads out more and more through the people, which it has been doing for a generation, quality will tend to lower unless it is stimulated by good example. The development of the American home is now well defined; we understand high standards and seek them in building houses and in furnishing them, and we have an ample technique at command. What we need to fight now is mediocrity.

The artistic progress that I have alluded to is the work of people of character and personality among both designers and their clientele. Now, however, that the world as a whole becomes interested and takes part in the procession, the highway is crowded more and more with good faithful workers, the solid, the imitative, the technically skillful who follow the crowd rather than lead it. The danger increases that design may become more of a business and less of an art.

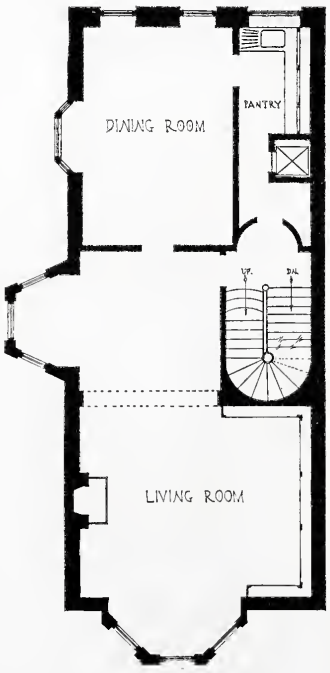
This encroachment of the humdrum is evident in house architecture today, particularly in regard to interiors. Yet

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interiors are the most personal of the architectural surroundings of our lives; in fact, they are nothing less than the world-old lore and art of the hearthstone, that is common to all mankind. While such household art should be community art in order to attain its highest purpose, it should also express our individual selves. In other words, while our homes should follow a certain accepted taste and excellence, they need not be exactly like every other man's house from New York to Los Angeles, except for a different hanging or the turn of a molding.

We are in danger of making the American home a business product. To mention merely the words "living room," "dining room," hallway," "bedroom," "library," is to cause most designers to think of an established formula for each, rather than to inspire them to imagine a picture. Usually nowadays the dining room means light paint, strip panels, formality, furniture just so, placed just so, with a bit of tapestry; silverware and plate ware and glassware no longer show-windowed behind glass doors, but most discreetly indicated by a candlestick or two *en axe,* as on a chapel altar; a forbidding portrait or two overlooking the scene. Entrance hallways are cold formal things, adequate frames for the ceremony of receiving the visitors' cards; no wonder the host no longer appears there, as he did in times of less sophisticated manners. A library is usually a paneled or bookcased room, light or dark, according to some half a dozen schemes concerning different arrangements of cupboards, shelves or cornices, all meaning about the same thing. Living rooms are more informal, but can you not recall examples where the pictures are exactly spotted, balanced carefully *en axe*—that universal formula of the contemporary decorator —with the current magazines carefully flattened out on the table like a hand at cards, the best sellers piled about geometrically? How one longs for a bold designer who will dare get a roaring fireplace in the dining room and introduce a gleam of rich carving and color and gold and dark wood; who will take the wicker furniture out of the glassed lounging room, put color into the living room, get along without chintzes; even make the entrance hall hospitable. He would be a true adventurer.

Of course, there are designers aplenty who are able to think for themselves and for their clients. Architects have done the highest work in interiors— White, McKim, Platt, Hastings, Eyre, Bigelow, Pope, to mention only a few men long ago well known. Among young leaders Walker & Gillette have accomplished fine results in houses in work noted for its personality. Characteristic indeed is the result gained by Mr. A. Stewart Walker of this firm in his own home in New York City, illustrated in these pages. It is a refreshing contrast to the average house design.



PLAN OF FIRST FLOOR—RESIDENCE OF A. STEWART WALKER, ESQ., NEW YORK.

This house of Mr. Walker's is an alteration, but nevertheless he has treated the plan more freely than does many a designer on a new project where there are no walls or floors existing to hamper him. Like most good schemes, it is extremely simple. The lot is a twenty-foot width, on the southeast corner of a principal street. The maximum of light and air was desired; hence the stairway was placed on the inside against the party wall, and consists of one straight flight up from the basement entrance hall to the living quarters, and a winding stair hall thence



MAIN ENTRANCE, ON REAR GARDEN—RESIDENCE OF A. STEWART WALKER, ESQ., NEW YORK.
Walker & Gillette, Architects.

up to the bedroom floors. This attractive, compact arrangement eliminates the usual too-prominent stair hall, eating up priceless space, destroying the charm of a city house with its dreary stairwell. Another skillful point is the entrance at the rear, on the cross street, from the little square garden enframed by iron fence and gate and lattice decoration against the neighbors' party walls: a most distinctive and charming, yet unobtrusive effect. The kitchen is placed on the corner, on the front of the main street—a happy idea, in view of the recent enthronement of the domestic worker. This placing of the kitchen results in the square dining room on the corner on the main floor above, with the living room opening off it and occupying the south exposure on the cross street, the light streaming in through its two bay windows. The floors above are given over to bedrooms. One could hardly find a more practical plan. It makes the greatest possible use of space and light, while affording those unexpected contrasts of light, arrangement and little vistas that so inspire the designer to do his best.

The separate rooms hold their part in this fine plan admirably. The entrance hall gives a most interesting impression to the visitor, simple, roomy, yet small in scale, and much more homelike than most New York entrances. Proportions are low, but not too low, the furniture is well chosen and placed, rather delicate, in scale with the room, not too stiff and showing well against the yellowish plaster wall. The lighting fixtures are exquisitely designed, as they are throughout the house.

From the entrance hall, one ascends the stair, a single flight inclosed in a well, with simple oak treads and a metal hand rail of corded rope design, to find



MAIN STAIR FROM ENTRANCE HALLWAY—RESIDENCE OF A. STEWART WALKER, ESQ., NEW YORK. WALKER & GILLETTE, ARCHITECTS.



ENTRANCE HALLWAY (THE WARDROBE DOORS ARE THE ENTRANCE TO CLOAK ROOM AND SERVICE PART OF HOUSE)—RESIDENCE OF A. STEWART WALKER, ESQ., NEW YORK. WALKER & GILLETTE, ARCHITECTS.



ENTRANCE DOOR (INSIDE) — RESIDENCE OF A. STEWART WALKER, ESQ., NEW YORK. WALKER & GILLETTE, ARCHITECTS.



LIVING ROOM, LOOKING EAST—RESIDENCE OF A. STEWART WALKER, ESQ., NEW YORK. WALKER & GILLETTE, ARCHITECTS.



DETAIL OF LIVING ROOM—RESIDENCE OF A. STEWART WALKER, ESQ., NEW YORK. WALKER & GILLETTE, ARCHITECTS.



LIVING ROOM, LOOKING WEST—RESIDENCE OF A. STEWART WALKER, ESQ., NEW YORK. WALKER & GILLETTE, ARCHITECTS.



DETAIL OF LIVING ROOM—RESIDENCE OF A. STEWART WALKER, ESQ., NEW YORK. WALKER & GILLETTE, ARCHITECTS.



DETAIL OF LIVING ROOM—RESIDENCE OF A. STEWART WALKER, ESQ., NEW YORK. WALKER & GILLETTE, ARCHITECTS.



DINING ROOM, WITH VISTA INTO LIVING ROOM—
RESIDENCE OF A. STEWART WALKER, ESQ.,
NEW YORK. WALKER & GILLETTE, ARCHITECTS.



DINING ROOM—RESIDENCE OF A. STEWART WALKER, ESQ., NEW YORK. WALKER & GILLETTE, ARCHITECTS.



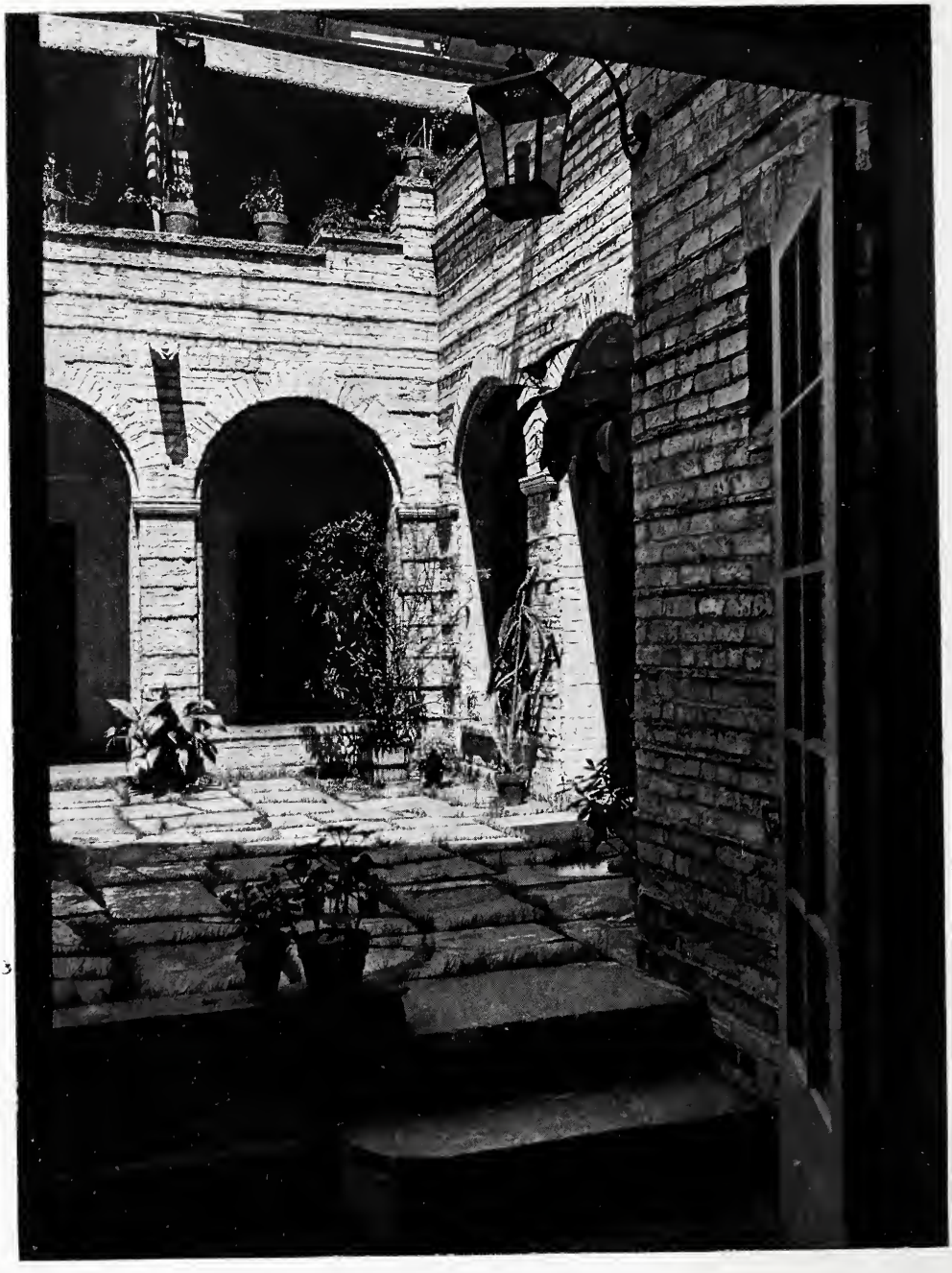
STAIRWAY UP FROM MAIN FLOOR—RESIDENCE OF A. STEWART WALKER, ESQ., NEW YORK—WALKER & GILLETTE, ARCHITECTS.

oneself at the entrance to the living room, looking through to the south bay window. And let me add, it is a living room in the true sense of the word—a room where people live at ease. This atmosphere of livableness of the room is permeating and hardly has it made itself felt than another impression of it is formed—one feels its quiet, but rich and beautiful colors. Here again the color is in harmony with the character of the room. It is comfortable, so to say, there is no insistent "keynote"; in fact, it is almost difficult to determine what the colors of the room are. There are the soft, rather light nut brown, woodwork and dark green curtains with narrow gold edging over the large bay window at the east end, and the rest of the tones are so quietly blended as hardly to be noticed.

The woodwork of this living room is a delightful study for the architect who appreciates fine wood details of paneling and mouldings. There is probably no better carved English pine cornice in existence, and the chimney piece is old. Most of the rest is pieced out, but so much in the spirit of the original fragments that one could hardly distinguish old work from new. The furniture is all of it comfortable, placed about simply, without any suspicion of designer's affectation. There is none of that ridiculous device of assembling pictures and bric-a-brac in painfully balanced grouping alluded to above. The large alcove, with shelves from floor to ceiling, fits admirably into the scheme, showing how successful an unsymmetrically shaped room may be. The floor is of oak boards about five inches wide, of dark stain. Here, as elsewhere in the house, is found that quaint assortment—not too much of it—of decorations, of pictures, carvings, metal work, miscellaneous nothings that an architect is bound to pick up in his activity and which add so much that is interesting and personal in a home. Of such are the ship model in the dining room and the fine gilt bird hung in the bay window of the living room.

The living room opens into the dining room, and a most charming, intimate sort of room it is in its walls of old English paneling, rather delicate in scale and in its fine old English furniture The ceiling is a low segmental plaste curve. This trim, dainty room offer. a charming contrast to the larger, more spacious, more "spread-out" living room. Most compact of all is the little Gothic winding stair from the main floor to bedroom floors above, of broad oak treads and odd rail. Its walls are bare and the chief decorations are a number of beautiful small metal hanging lamps on the landings. Upstairs are a series of airy and most cheerful rooms, extremely simple, without formality such as strip panels. Their character has more of the lightness of a summer home than of that heaviness too often found in city houses.

All this design of Mr. Walker's house results in a rare combination of comfort and charm, of colorful decoration, of wit, personality. On the exterior there has been no attempt to modernize the plain front of gray painted brick and brownstone, and the not unpleasing old-fashioned look has been maintained. On the cross-street on either side are a number of unconventional house fronts, very simple, of stuccoed walls and gay painted details that, if developed further, will make this block one of the most interesting in New York City, where, as in most cities, blocks of houses, even if well designed individually, are usually uninspiring as a whole.



ENTRANCE TO COURT FROM ASSEMBLY ROOM—COSMOPOLITAN CLUB, NEW YORK. EDWARD C. DEAN, ARCHITECT.

The COSMOPOLITAN CLUB
NEW YORK
EDWARD C. DEAN, ARCHITECT

By Leon V. Solon

THE rocketing tendency of prices for building materials and labor has caused purchasers of standing walls, sound roofs, and dry foundations to regard such items as having inherent value, worth preserving. Where a change in the purpose of the building is demanded, the consideration is carefully weighed as to whether it is essential to clear the scene with dynamite and crowbar or whether the choice of a versatile architect will not effect the desired result through conservation and a minimum activity in demolition.

An apologetic attitude, bordering on contempt, has usually characterized the architect's feeling towards alteration work; and the plane from which the problem is studied is not infrequently set deliberately at low level. It has ranked as "chores," as an unprofitable stop-gap devoid of credit, the professional equivalent to the pot-boiler of the conscienceless painter; such a pose is indefensible, and can serve no purpose other than gauging the measure of those maintaining it—in most cases superfluous data. Alteration problems are primarily essays in ingenuity, and success is not for those who are unable to mold a sequence of solutions in predetermined cubic dimensions; though it is problematic whether the existing dimensions of the shell of a converted building can impose greater restrictions on original expression than exist in the present New York City zoning laws.

The degree to which the fixed point in a problem develops into an opportunity or an impediment, is naturally measured by the intellectual fertility or barrenness of the individual furnishing the solution. Imagination, like virtue, is more likely to be enlarged upon by those bereft than those endowed. The majority of those blessed with the faculty of constructing that individual mental combination recognized as an "idea," regard inventiveness as the staked claim of the miner, where results depend primarily on personal effort expended in the prescribed area. To the unimaginative the "idea" usually assumes the nebulous charm of a legacy imminent from an unexpected quarter.

The old dwelling converted by Mr. Dean into the Cosmopolitan Club for women was of the out-of-date variety located in Fortieth Street, east of Lexington Avenue. To describe it in its original condition as negligible architecturally would be to flirt with commendation without warrant. Such buildings have an extraneous interest, nevertheless, in that they are milestones on the road of American progress, marking the end of the dismal stretch preceding the McKim and White era. They are relics of the day when the architect was the contractor's hack, and, it must be admitted, in most cases professional accomplishment merited no superior fate. The ideals of the client of that period substantiality and middle-class comfort are apparent as the main objectives; immunity from ideals characterizes the architects' most acceptable work.

The transformation effected by Mr. Dean should prove encouraging and inspiring to holders of such property, as he has attained his effect with comparatively small outlay, by a careful study of the decorative possibilities latent in previously used material, thereby giving us a demonstration of the manner in

which the prosaic subject of conservation is amenable to artistry.

The picturesque windows and gables of the adjoining building, originally built as a church and now serving as a sculptor's studio, gave the cue in treatment and supplied the mental impulse resulting in the cloister idea. The court round which the cloister runs was made by joining together the backyards of two old Lexington Avenue houses, now leased by the Club. The cloister and loggia are supplementary approaches to a large assembly-room in the old church building. There was doubt in the minds of some of the Club Committee as to whether the creation of an arcaded court was feasible, but Mr. Dean has succeeded with judiciously calculated proportions in obtaining an exceptionally pleasing result. The exterior walls are of common brick; here the idea of conservation has been developed to advantage, as much of the material had been used before, and painted, with the result that traces of the old coats of red, blue and green paint add considerably to the color value of the wall surfaces. At every fifth course, bits of building tile are set in wide cement joints, producing an appearance of stratification enriching the common brick bonding. All exposed brickwork that can be seen above the courtyard, has been given a coat of pinkish whitewash, the color of parts of the old church building; this color is applied very irregularly and has a decidedly mature quality of tone.

The roof slates are set in cement without striking a clearing of the joints, the irregular and ragged fragments of cement left on the roof giving a texture of surface that a more precise laying of slate could not effect.

The excellent paving of the court is yet another benefit of salvage, the flagstones having made an inartistic debut as pavement of the original back-yards. These flags are set in earth with joints sodded and sown with grass seed.

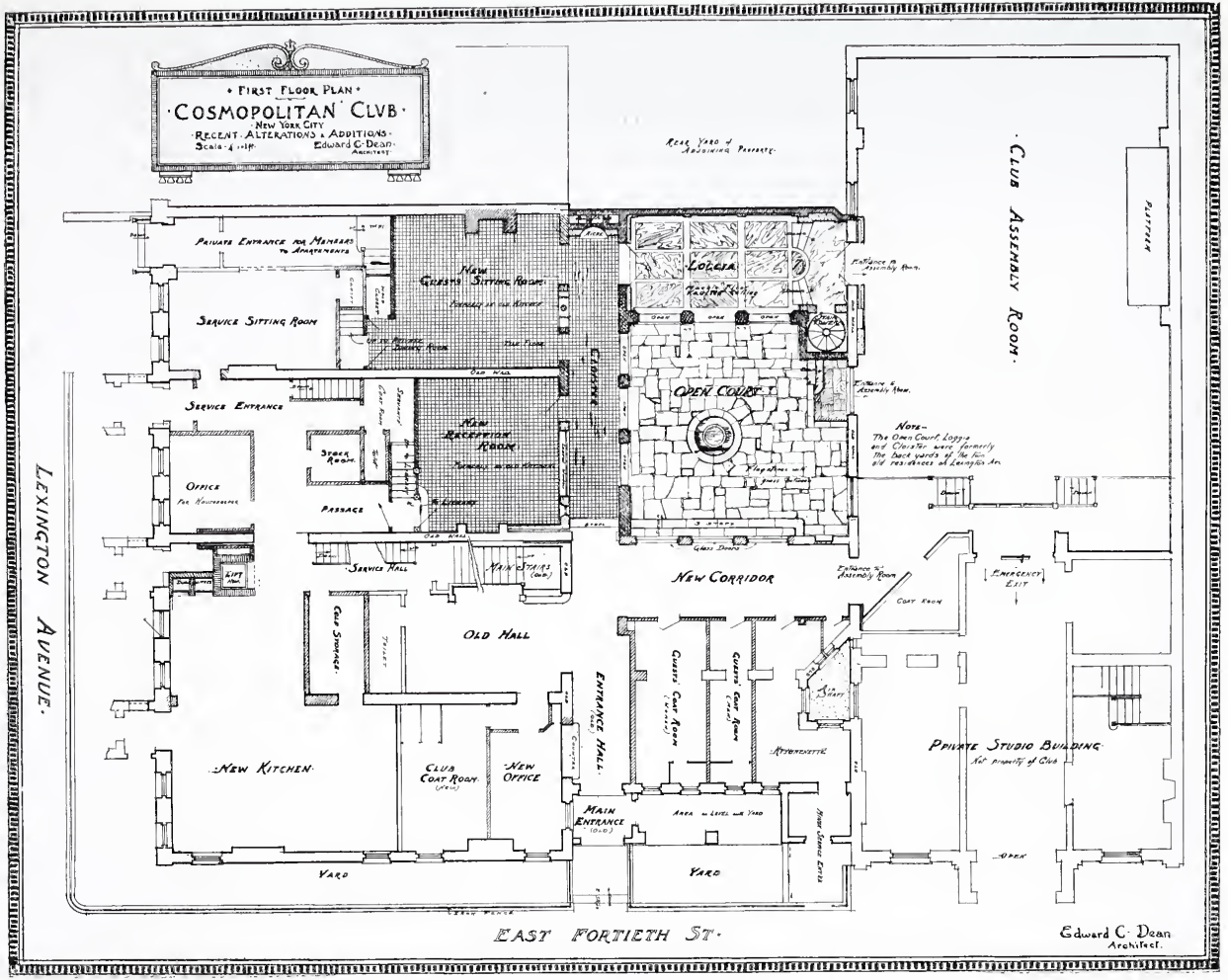
The floors of the rooms opening off the court are tiled with three-inch tiles, of a rich earthen color, set very freely, no attempt being made to keep a uniform width of cement joint. These have considerable color variation which has been used to good purpose, the shades being graded instead of taken at hazard, working up to the lightest shade in the darkest parts of the floors; the popular mottled effect has been carefully avoided in this instance with good judgment. Much variation of texture exists in the plastered wall surfaces, which are left roughly troweled.

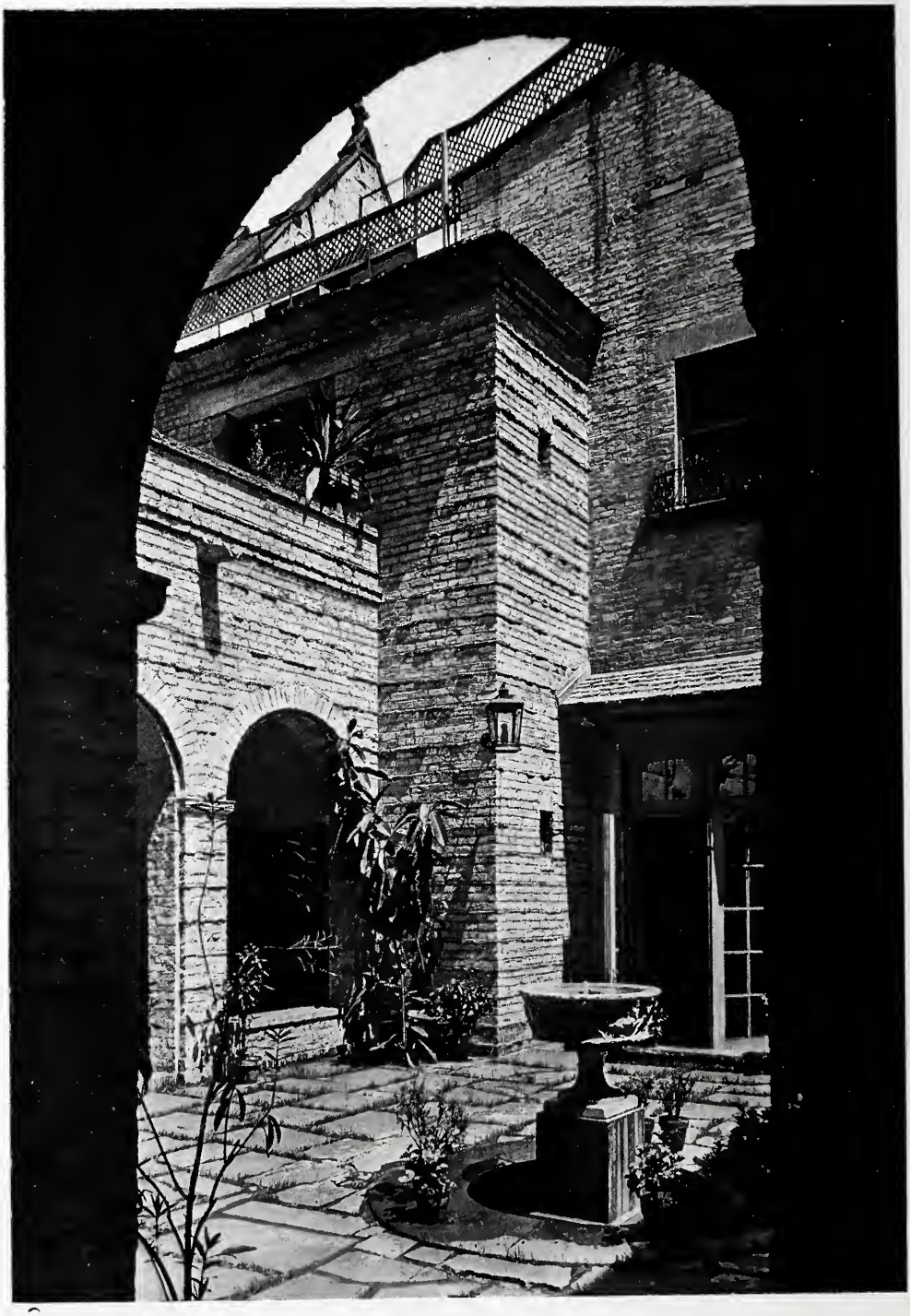
The kitchens of the old Lexington Avenue houses were found to be on the same level with the back-yards, which facilitated their transformation into reception rooms giving off the cloister, as the open corridor is named; our illustrations show how the wide recesses occupied by the ranges have been converted into attractive fireplaces.

The arches of the courtyard are filled with sash and frames, so constructed that they may be entirely removed in the summer months, leaving the simple brick arches free from any disfiguring woodwork; the frames are bolted into the brick, the bolts being removed with the frames in the spring, and the holes plastered up and painted.

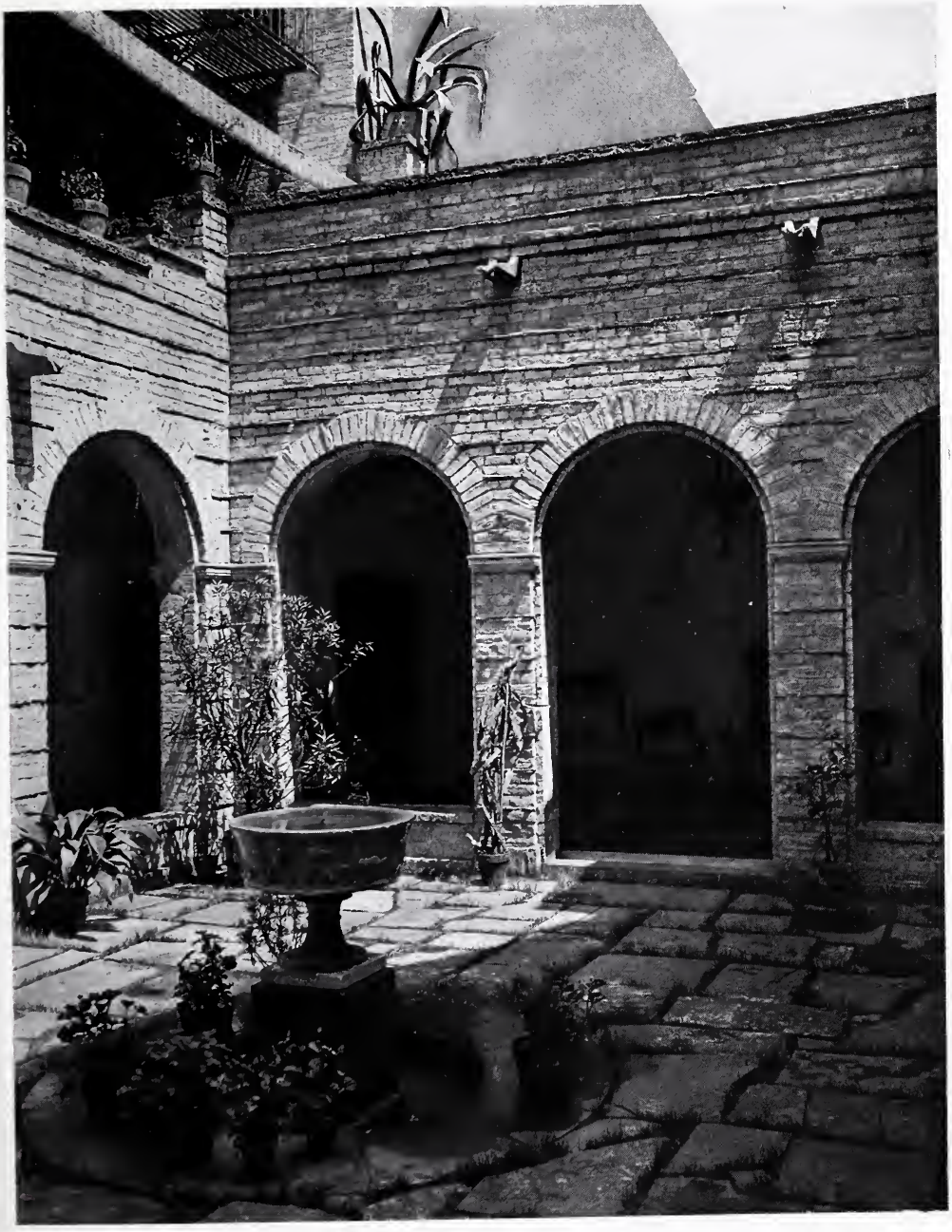
The fountain in the court comes from an old villa in North Italy and adapts itself well to its new environment. All the ironwork in the balconies and grills is ancient; the grilles in front of the cloister radiators being particularly handsome and interesting examples of old Italian workmanship of some considerable value. They were originally door-grills which have been reversed to fulfill their modern function.

The lighting fixtures are amusing studies in conservation. These are composed of odd bits of ornamental iron and woodwork ingeniously grouped. In the loggia an old Spanish brazier, hung from chains, supplies indirect lighting. The large lantern in the courtyard is a Boston relic which began its existence as a street-lamp. Old velvets and coverings of reddish hues give the prevailing color note to the guests' reception room; rich purples and faded yellows figuring as predominant tones in the loggia. Water stain is used for all the woodwork.


First Floor Plan
Cosmopolitan Club
New York City
Recent Alterations & Additions
Scale 1/16 in. = 1 ft.
Edward C. Dean
Architect
Lexington Avenue
East Fortieth St.
Club Assembly Room
Rear Yard of Adjoining Property
Private Entrance for Members to Apartments
Service Sitting Room
Service Entrance
Office
Stock Room
Passage
Service Hall
Lift
Main Stairs
New Guests' Sitting Room
Formerly Library
Old Wall
Elevator
Main Reception Room
Formerly Music Room
Open Court
Loggia
Fountain
Note—
The Open Court, Loggia and Cloister were formerly the back yards of the two old residences on Lexington Ave.
New Corridor
Entrance to Assembly Room
Emergency Exit
Coat Room
Old Hall
Club Storage
Toilet
Entrance Hall
Guests' Coat Room
Guests' Coat Room
Attendants
Private Studio Building
Not property of Club
New Kitchen
Club Coat Room
New Office
Main Entrance
Area on Level with Yard
Yard
Open
Edward C. Dean
Architect



VIEW OF COURT FROM ENTRANCE CORRIDOR--COSMOPOLITAN CLUB, NEW YORK. EDWARD C. DEAN, ARCHITECT.



FOUNTAIN AND LOGGIA—COSMOPOLITAN CLUB, NEW YORK. EDWARD C. DEAN, ARCHITECT.



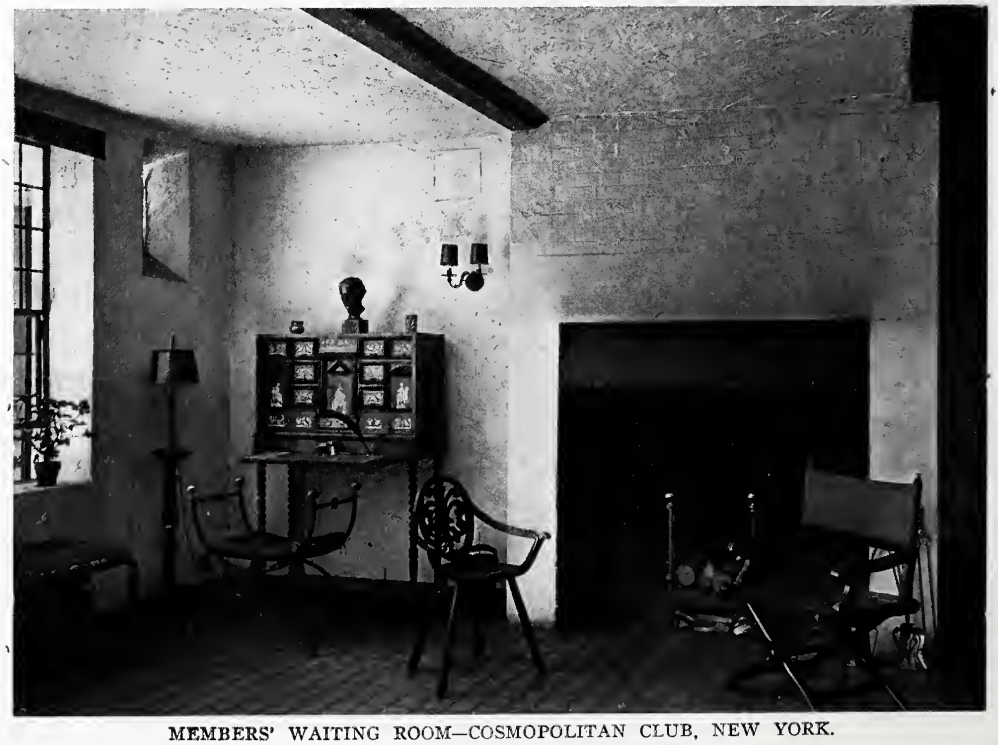
ENTRANCE TO ASSEMBLY ROOM—COSMOPOLITAN CLUB, NEW YORK. EDWARD C. DEAN, ARCHITECT.



SOUTHWEST CORNER OF COURT — COSMOPOLITAN CLUB, NEW YORK. EDWARD C. DEAN, ARCHITECT.



GUESTS' SITTING ROOM—COSMOPOLITAN CLUB, NEW YORK.
Edward C. Dean, Architect.



MEMBERS' WAITING ROOM—COSMOPOLITAN CLUB, NEW YORK.
Edward C. Dean, Architect.



CLOISTER—COSMOPOLITAN CLUB, NEW YORK.
Edward C. Dean, Architect.



LOGGIA—COSMOPOLITAN CLUB, NEW YORK.
Edward C. Dean, Architect.

irregularly applied and subsequently waxed.

A narrow stair leads from the guests' sitting room to the private dining room which is decorated after a late eighteenth century manner, the walls of which are paneled and alternately treated with mirrors and old Portuguese chintz. An eighteenth century Italian mirror hangs over the mantel, an obvious contemporary of the original dwelling. Another stairway leads from the guests' reception room to the members' library, reserved exclusively for members. The library is of ample dimensions and overlooks the courtyard; it consists of four of the original bedrooms thrown into one space. Heavy, tall bookcases line the walls. The lighting was increased by replacing the old windows with larger ones, leaded and decorated in their upper panels with leaden devices reproducing the various insignia of medieval metal-workers. The glazing is brightened by the introduction of purple and green glass in places. The main dining room faces Fortieth Street and is situated on the second floor; it has been enlarged and is screened from the stair-hall, the stairs formerly opening directly into the dining room. The small lunch room on the corner of Lexington Avenue and Fortieth Street is decorated after the Delafosse manner, the ornamentation being confined to the panels over the mantel and doorways. No structural change was made in the old living room on the second floor beyond creating access to the roof of the cloister and loggia as a means of giving extra out-of-door accommodation during the warm weather, an appreciable benefit for those condemned to the city in the dog-days.

In a club instituted for the congregation and social intercourse of women engaged in literary, artistic and professional pursuits, distinctive character in plan and design is essential; in addition, an atmosphere of intellectual eclecticism must be fostered, habitually associated with old master drawings, Renaissance majolica and *cire perdu*. Where financial resources are necessarily restricted, aesthetic values must be acquired by the skilled appreciation of qualities, and decorative richness attained through texture and color manipulation, when the precious is beyond reach. Nothing here has been wasted that could serve, and all serves so adequately that deliberate choice appears at first sight to have determined selection. It is an object lesson in judicious conservation, and an example of taste as an asset in investment. A casual onlooker visiting this building would be impressed by evidences of fastidiousness in reticent taste, little suspecting that he views Economy in graceful garb.

The SOCIAL CENTER

By FISKE KIMBALL

PART III - *Civic Enterprises*

THE ultimate form of the social center is the civic community center. Its advantages over the co-operative and the philanthropic enterprise are both numerous and solid. There is no financial barrier, however low, to its enjoyment; there is no mistrust of being patronized, but instead, a sense of proprietorship. The civic ideal is to reach all, and with civic resources there is at least the possibility of this, which private agencies could never hope even to approach. The chief difficulty has been, and still is, to arouse the authorities to the necessity of civic action. For this the Y. M. C. A. and the settlements, in their different fields, have paved the way; the principle is admitted, and eager experiment as to the best method of application is in progress.

Already before the war there were notable beginnings, both in this country and abroad. To England, where the problems of modern industrialism first reached the critical stage, we may well look for valuable suggestions. Civic agencies there took up the task of housing social and recreative activities on a large scale as early as 1883, when an act of Parliament appropriated the income of the old parochial endowments of London to the purpose. Thus began the foundation of civic "industrial institutes," or "polytechnics," as they came rather accidentally to be called, in which, co-ordinately with vocational training, were to be carried on—in the words of the first regulations, (1892): "Public lectures; musical and other entertainments and exhibitions; instruction and practice in gymnastics, drill, swimming, and other bodily exercises; facilities for the formation and meeting of clubs and societies, a library, museum and reading room or rooms."

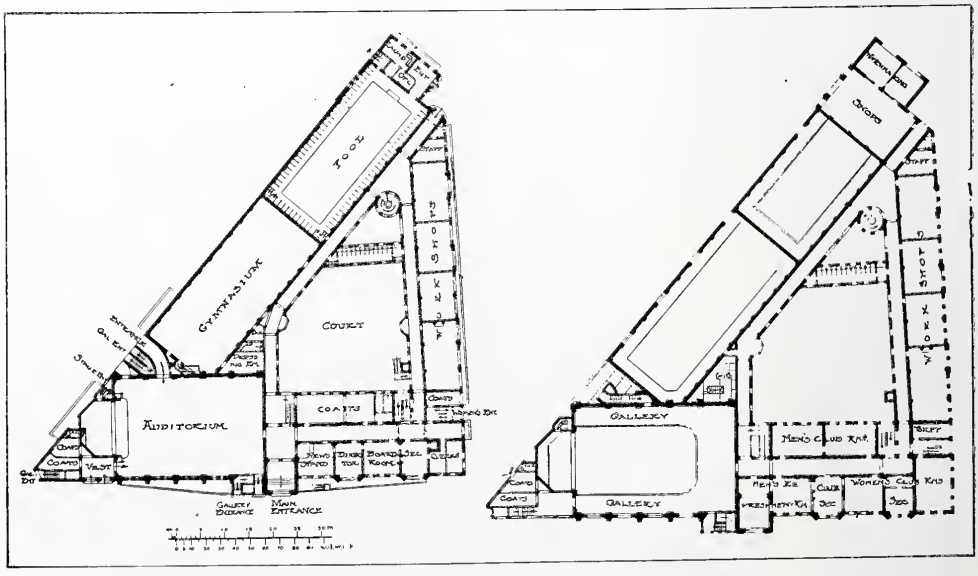
Among the finest of these numerous establishments is the Northampton Institute in Clerkenwell. As one of three buildings of a single enterprise, "The City Polytechnic," it provides principally for the recreational and social phases of the work. About the sides of an irregular lot are arranged, with the practical ingenuity characteristic of English design, the great concert and lecture hall, the gymnasium, the large pool, the vocational shops, and the quarters for clubs and administration. Thus in England, all the activities of a social center were splendidly housed under civic auspices over twenty years ago.

In America, where public authorities generally have been unprepared to grant money for such a thoroughgoing establishment, the struggle for civic provision of social facilities has followed several distinct lines of attack. On one hand there has been the effort to secure buildings and land for this or that special facility, pressingly needed—public baths, municipal gymnasiums and playgrounds; on the other, to employ existing buildings, such as the schools, for broader social uses. To these have been added in the last few years, the attempt to regenerate political life through replacing corrupt ward politics by district "town meetings," and respectable voting places. Finally has come the effort to combine several or all of these elements to secure greater efficiency and provide a true center of community life.

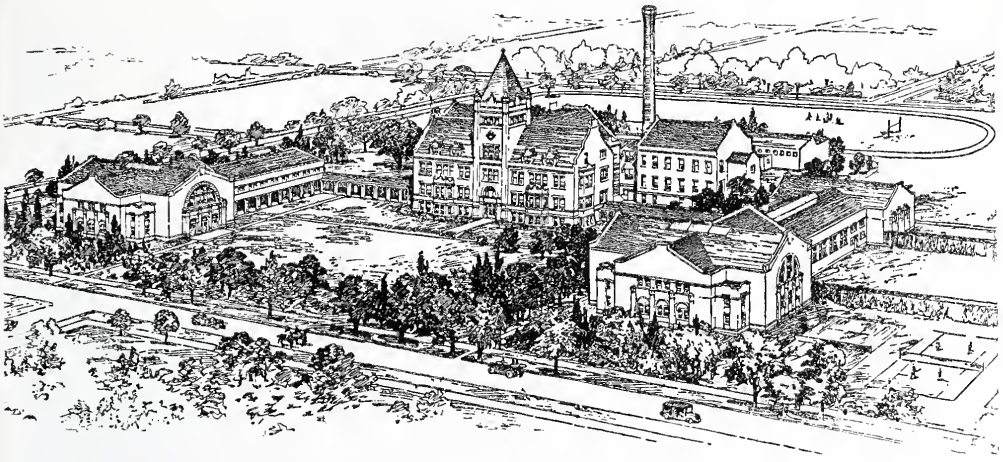
Separate municipal baths or gymnasiums are types already well established and understood. The current requirements of the "socialized school" are also now sufficiently recognized, and have been discussed very adequately in the *Architectural Record* for November, 1917. It is easy to understand the argument of the advocates of the school as a social center, on the ground of efficient utilization, night and day, summer and winter, of a plant already existing. But



NORTHAMPTON INSTITUTE, CLERKENWELL, LONDON.
E. W. Mountford, Architect.



FIRST AND SECOND FLOOR PLANS—NORTHAMPTON INSTITUTE, CLERKENWELL, LONDON.
E. W. Mountford, Architect.

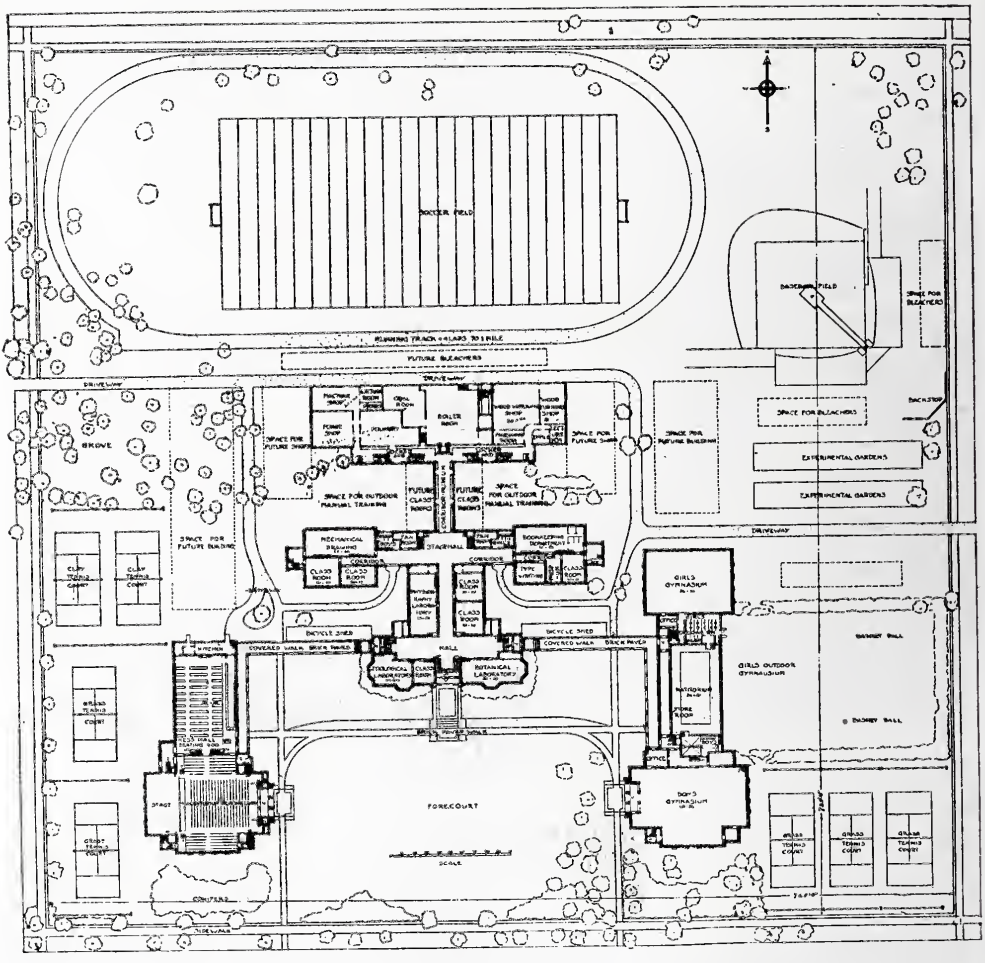


NEW TRIER TOWNSHIP HIGH SCHOOL, KENILWORTH, ILL.
Perkins, Fellows & Hamilton, Architects.

until the school building is modified much more radically than has yet been the case, and the personnel is reorganized on a much broader basis, it will be difficult for the school to become the ideal community center for adults. It is questionable whether the final relation of the school to the community center may not be rather that of one component element, somewhat closely restricted to class rooms and shops, but grouped in the most intimate connection with other buildings housing the auditorium, gymnasium and branch library, with the playground and so on—of which the school and outside organizations share the use. Such a group is foreshadowed in the scheme for a high school at Kenilworth, Illinois, where the social features occupy essentially independent units. Thus the same efficiency of utilization can be secured without having to overcome the prejudice of native-born adults against "going back to school," and without creating a single building of cumbersome, amorphous type, of which the diverse and often preferably simultaneous uses are difficult to co-ordinate and supervise.

The solution of the civic community center problem has been approached from another direction, through the field house of the municipal playground or small park. The pioneer work here was done by the South Park Board of Chicago, which in 1903 to 1907, expended six and a half million dollars on recreation centers, which include not only playgrounds, gymnasiums, and swimming pools, but people's club houses with refectories, reading rooms and assembly halls. Typical of these buildings are those at Hamilton Park and at Armour Square. In each case the men's and the women's gymnasiums and locker rooms occupy balancing wings, with the social rooms around and above the main entrance hall. At Armour Square the buildings surround a court lined with individual dressing booths and containing the swimming pool, the entrance pavilion with the social rooms forming a distinct block. A later development is to leave such a court free from youthful activities, for elderly persons who seek and require sheltered, quiet surroundings. In the more recent Chicago field houses, the size and accommodations have been increased, with gymnasiums fifty feet by eighty, assembly halls of equal size, showers for men and for women totaling over sixty, and dressing booths numbering two hundred. The precedents established in Chicago have been widely followed in other cities.

The athletic facilities of the Chicago recreation centers were instantly utilized to the full under the guidance of ath-



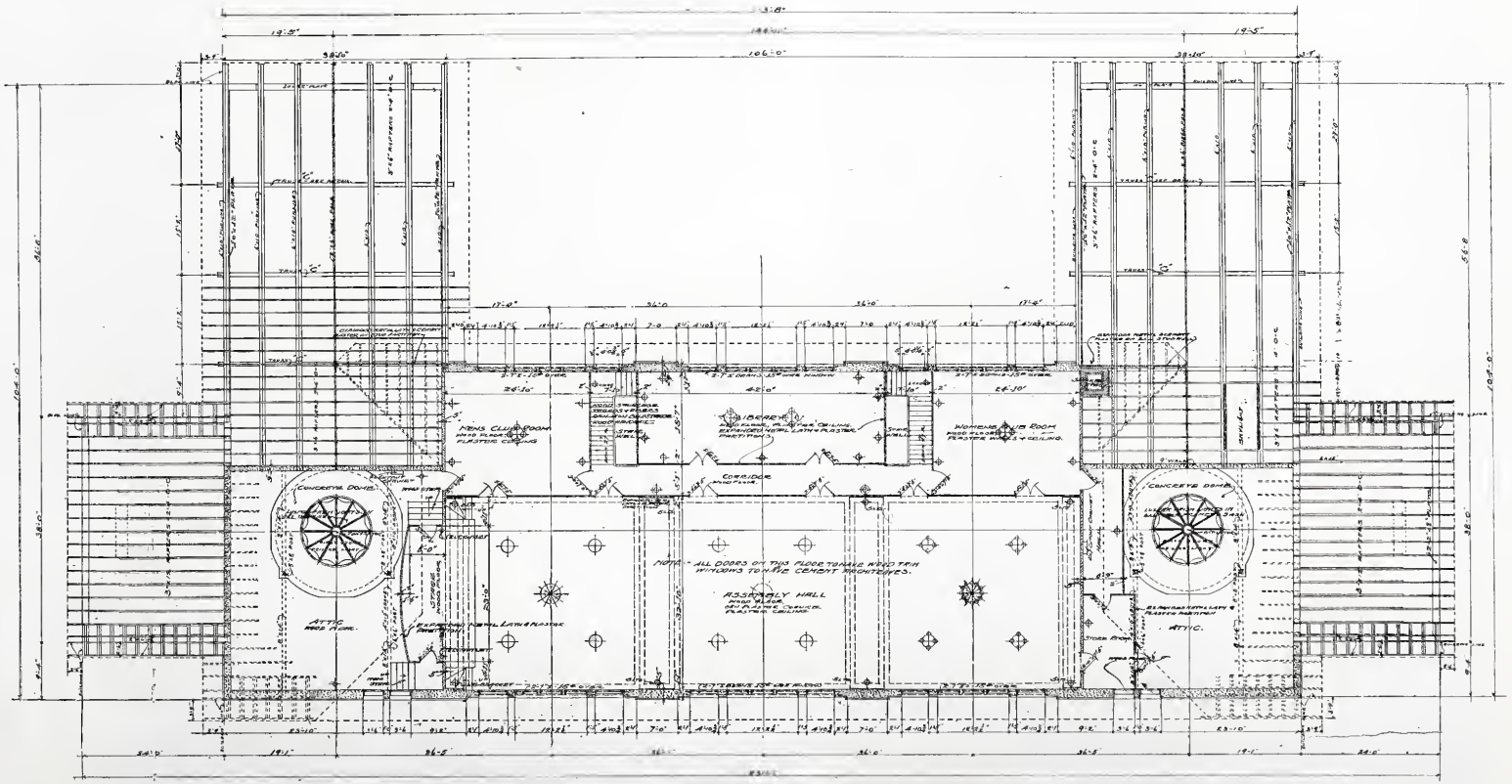
PLOT PLAN—NEW TRIER TOWNSHIP HIGH SCHOOL, KENILWORTH, ILL. PERKINS, FELLOWS & HAMILTON, ARCHITECTS.



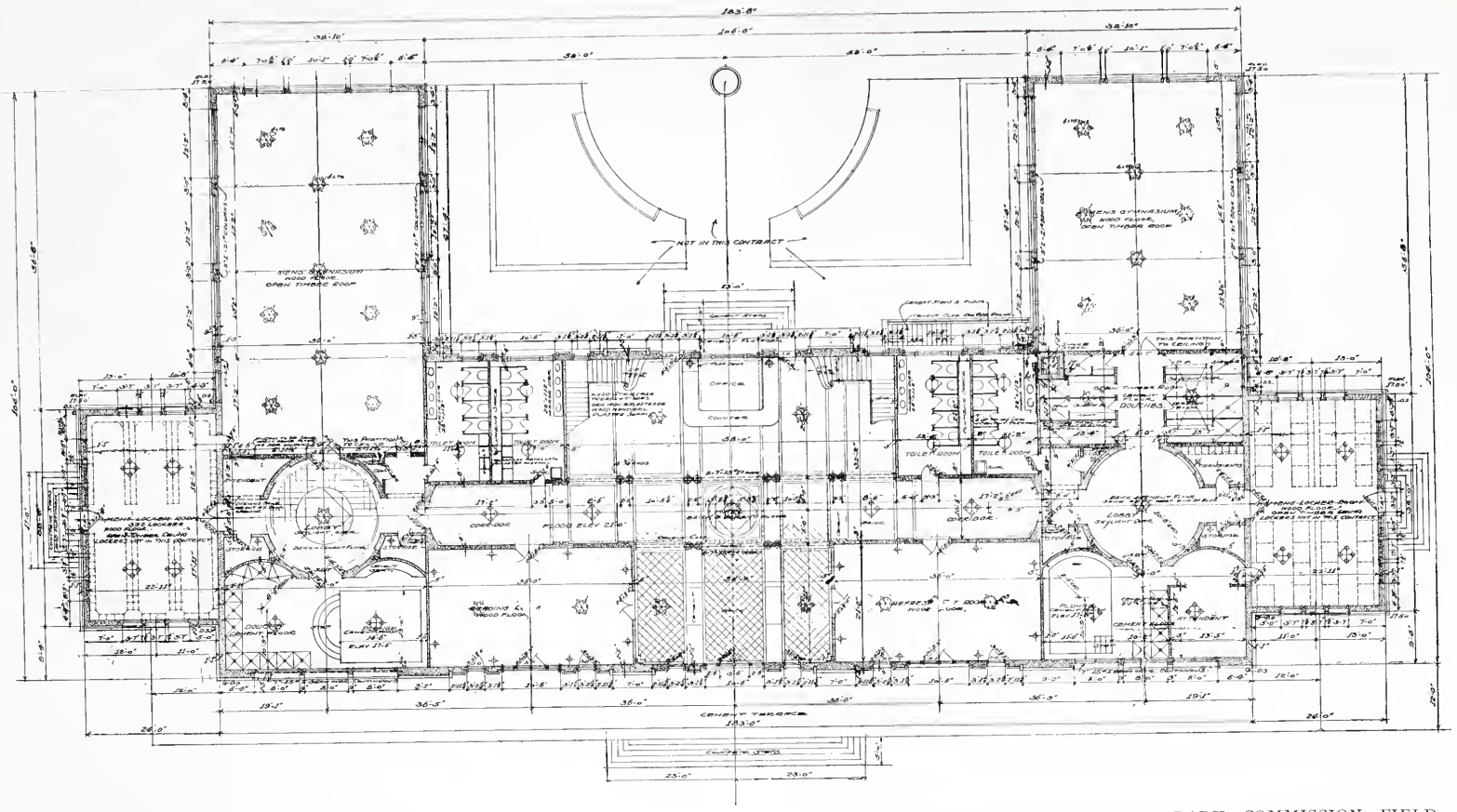
HAMILTON PARK, CHICAGO.
D. H. Burnham & Co. (Graham, Anderson, Probst & White), Architects.



FIELD HOUSE—HAMILTON PARK, CHICAGO.
D. H. Burnham & Co. (Graham, Anderson, Probst & White), Architects.



SECOND FLOOR PLAN—SOUTH PARK COMMISSION FIELD HOUSE FOR PARK NO. 9, CHICAGO. D. H. BURNHAM & CO. (GRAHAM, ANDERSON, PROBST & WHITE), ARCHITECTS.



FIRST FLOOR PLAN—SOUTH PARK COMMISSION FIELD HOUSE FOR PARK NO. 9, CHICAGO. D. H. BURNHAM & CO. (GRAHAM, ANDERSON, PROBST & WHITE), ARCHITECTS.



FIELD HOUSE—ARMOUR SQUARE, CHICAGO.
D. H. Burnham & Co. (Graham, Anderson, Probst & White), Architects.

letic instructors. The social activities for which their field houses afforded opportunity were naturally slower to develop. The mere provision of places for social and recreative gatherings led to a considerable use of the assembly halls and club rooms, but it was soon realized that for these to attain their full service, something more than physical accommodation was necessary. The personal element of leadership, furnished in the settlement by the workers, and especially the head worker, has accordingly been supplied by the appointment of field house directors to promote the social activities, with gratifying success.

An approach to the union of playground, school, baths, and other traditional elements is found, under urban conditions, in Chicago, at Stanford Park, with the field house of which the Washburne School and a branch library stand in close physical relation, although they are administratively distinct. Obviously the full value of such a combination would be realized only under a unified administration.

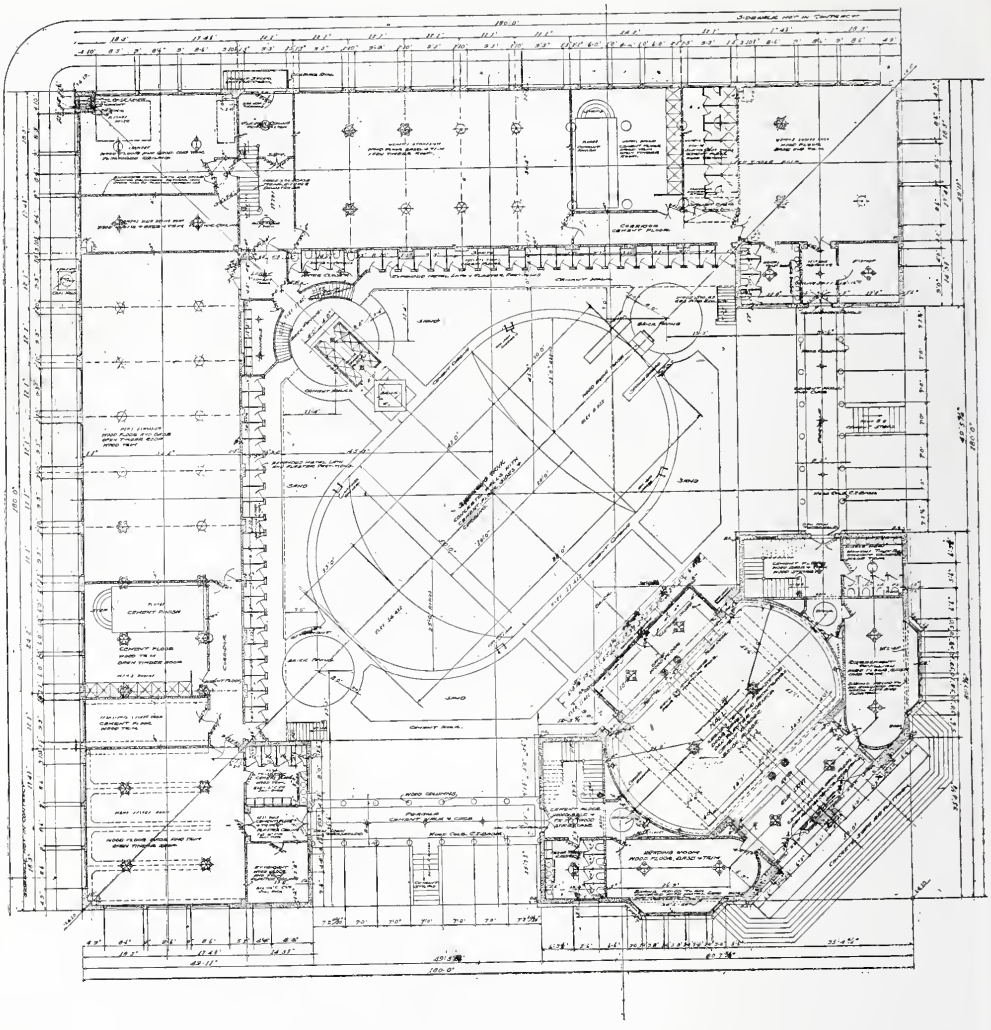
All these experiments have still left to the future the form of civic community center which might ultimately be desirable, transcending the opportunist adaptations of existing types. This question also, Chicago has sought to answer, through the competition for plans for a neighborhood center held by the City Club in 1914 and 1915, on a program prepared with the co-operation of the Illinois Chapter of the American Institute of Architects. This program was very broadly drawn, leaving to the competitor the decision as to the sorts of institutions to be included in such a center, so that it might provide for the creation of real urban sub-centers by the grouping of governmental, and even commercial buildings, as well as of educational, recreational, and social facilities. It was the belief of those responsible for the competition "that the grouping of neighborhood public and semi-public institutions at a common center would tend to stimulate neighborhood pride and activty, to reduce the social isolation of the family, and to restore, in part,



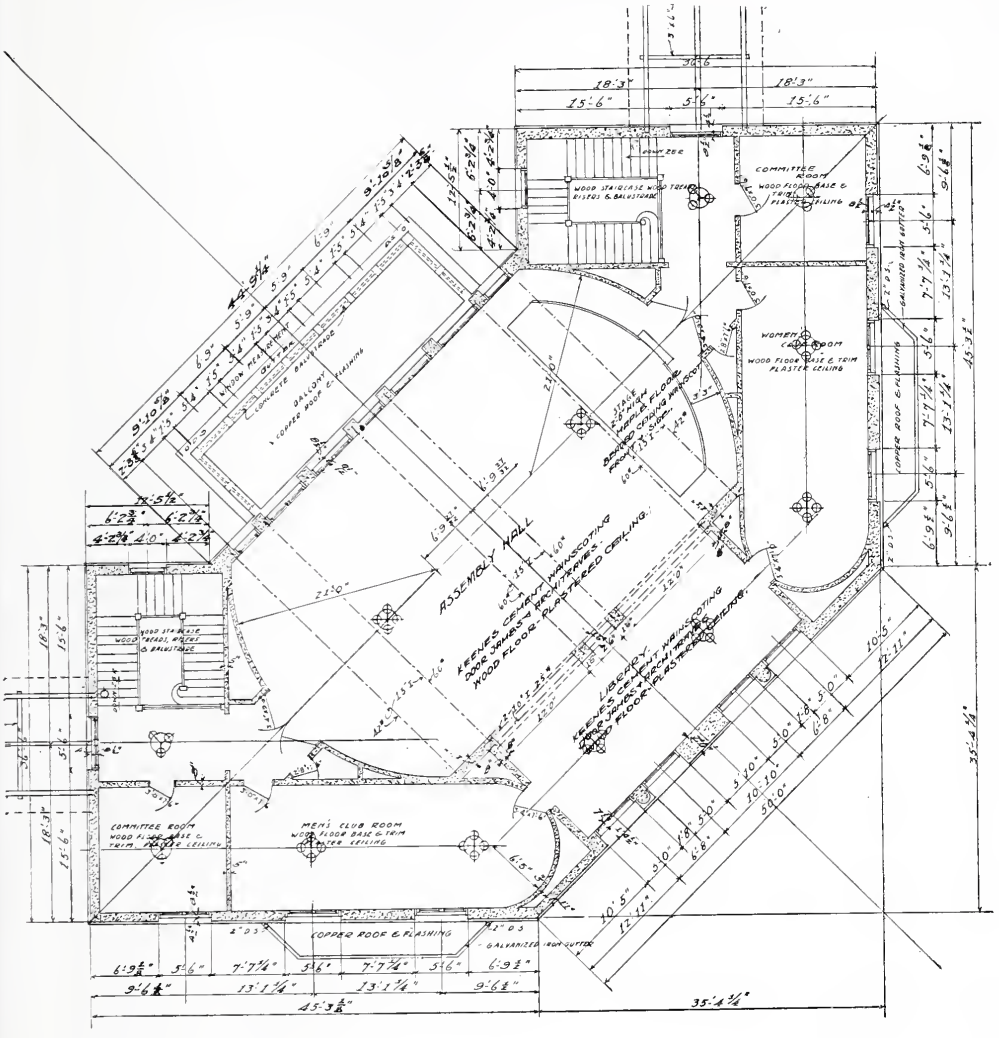
THE POOL—ARMOUR SQUARE, CHICAGO.
D. H. Burnham & Co. (Graham, Anderson, Probst & White), Architects.

the neighborhood life which has so largely vanished from our big cities." In this belief, the authors of the premiated designs, and other submitted *hors concours,* combined in related groups not only schools, playgrounds, and library, but Y. M. C. A., Y. W. C. A., and churches; hospital and day nursery; market square, shops, banks, and moving picture theatres; post office, telegraph and express offices; police and fire stations. In advance of the proposed publication in book form of the designs submitted, Mr. Joseph Hudnut, the editor, has kindly permitted us to publish two of the plans, with other material collected by him. The book is intended to include, also, studies of comprehensive social centers for two specific neighborhoods in Chicago, prepared by Mr. Hudnut, under the auspices of a committee of the club, a block plan of one of which is also reproduced.

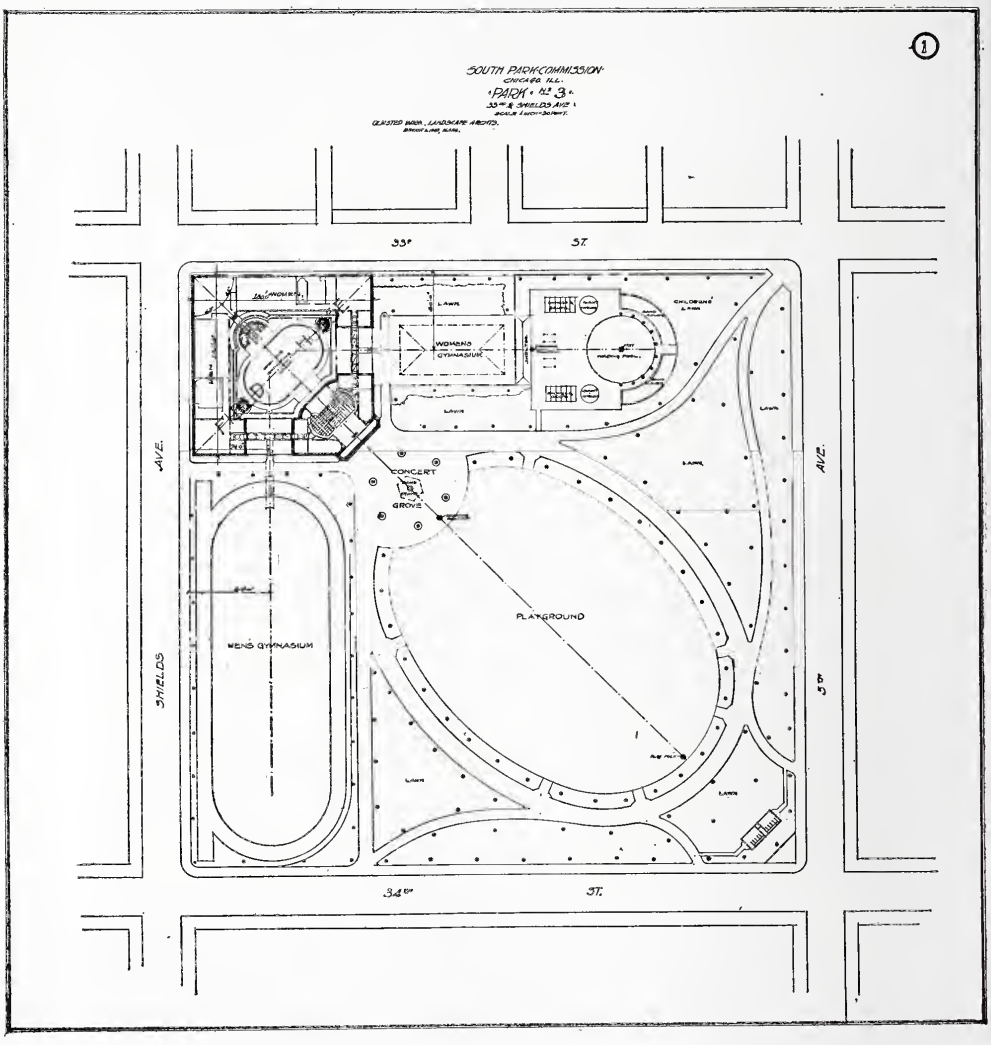
Meanwhile, the war has brought reenforcement to the forces working for community center buildings, through the idea that the war memorials which are to be expected in every community should not take the form merely of conventional "monuments," but should be structures at once commemorating the dead and embodying the spirit of human brotherhood for which they fought. The idea is indeed an admittable one, and offers a prospect of financial support for a civic community house in many places, where one could otherwise scarcely be hoped for. Under the guidance of experienced workers, such as those of the settlements or the War Camp Community Service, it may lead to the most valuable results. The suddenness of the opportunity, however, is resulting naturally in the hasty appearance of many plans in which accumulated experience as to the most fundamental needs is little recognized. The value to the community of art, music, and drama—especially when of its own creation—is undoubted, and provision for them must be included, but in all but the most favored societies there are other matters more pressing.



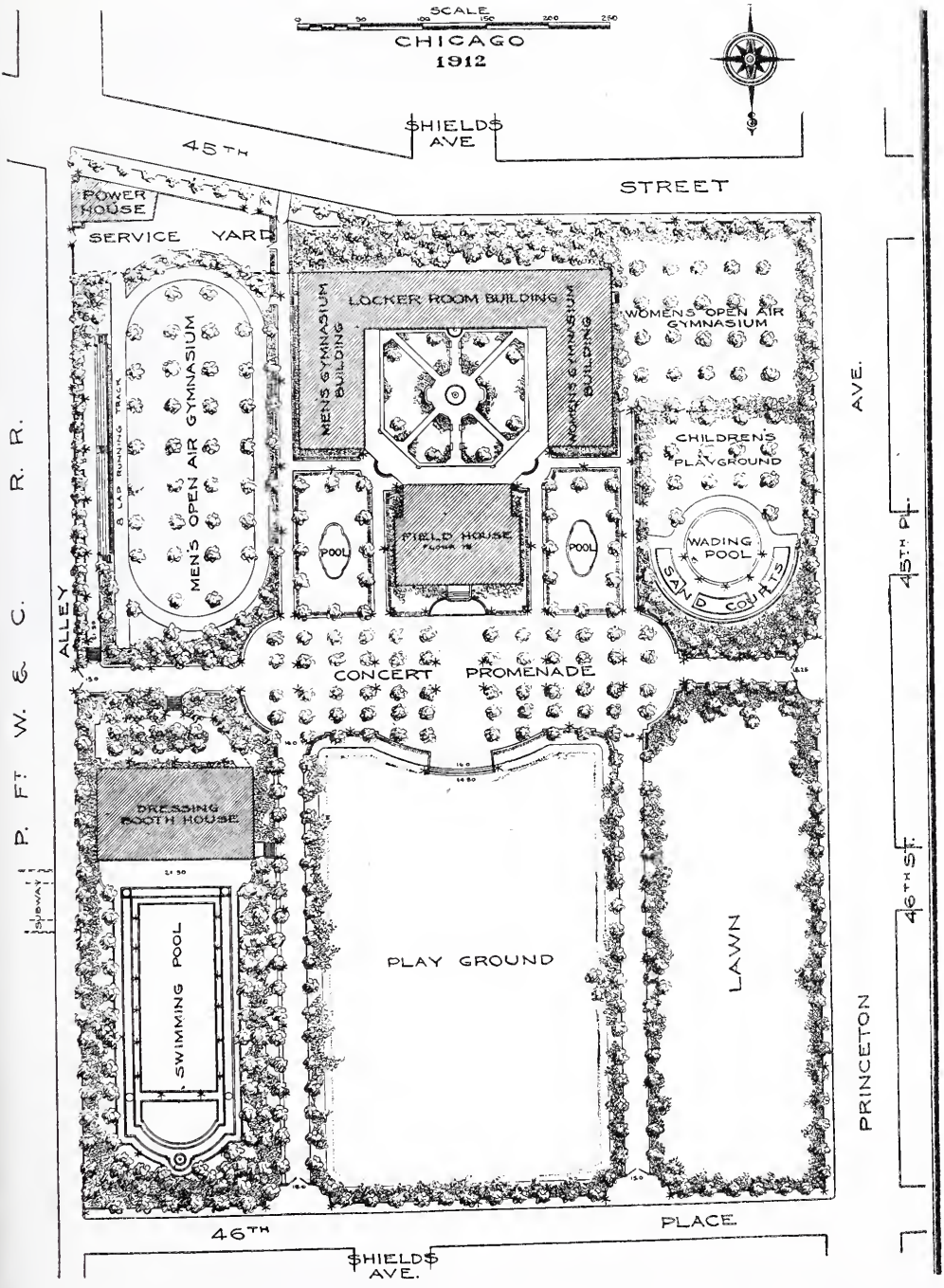
FIRST FLOOR PLAN—SOUTH PARK COMMISSION FIELD HOUSE FOR PARK NO. 3, CHICAGO. D. H. BURNHAM & CO. (GRAHAM, ANDERSON, PROBST & WHITE), ARCHITECTS



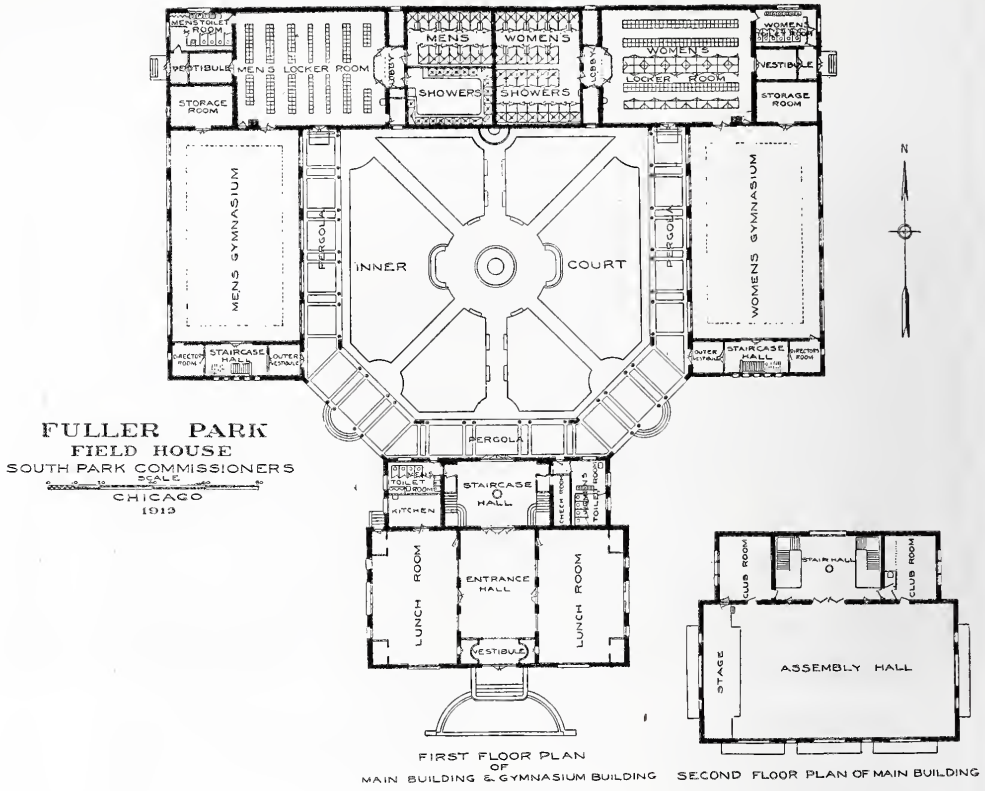
SECOND FLOOR PLAN—SOUTH PARK COMMISSION FIELD HOUSE FOR PARK NO. 3, CHICAGO. D. H. BURNHAM & CO. (GRAHAM, ANDERSON, PROBST & WHITE), ARCHITECTS.



SOUTH PARK COMMISSION PLAN FOR PARK NO. 3, CHICAGO. D. H. BURNHAM & CO. (GRAHAM, ANDERSON, PROBST & WHITE), ARCHITECTS.



SOUTH PARK COMMISSION PLAN
FOR FULLER PARK, CHICAGO.



SOUTH PARK COMMISSION FIELD HOUSE FOR FULLER PARK, CHICAGO.

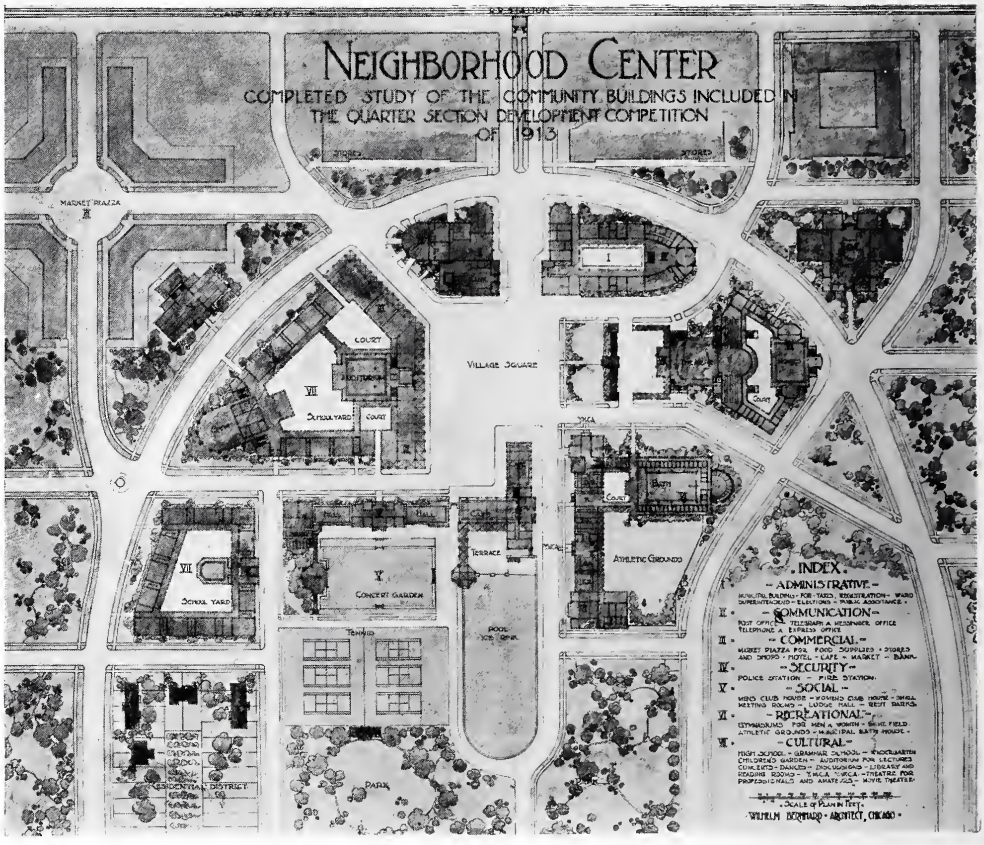


STANFORD PARK AND THE WASHBURNE SCHOOL, CHICAGO.

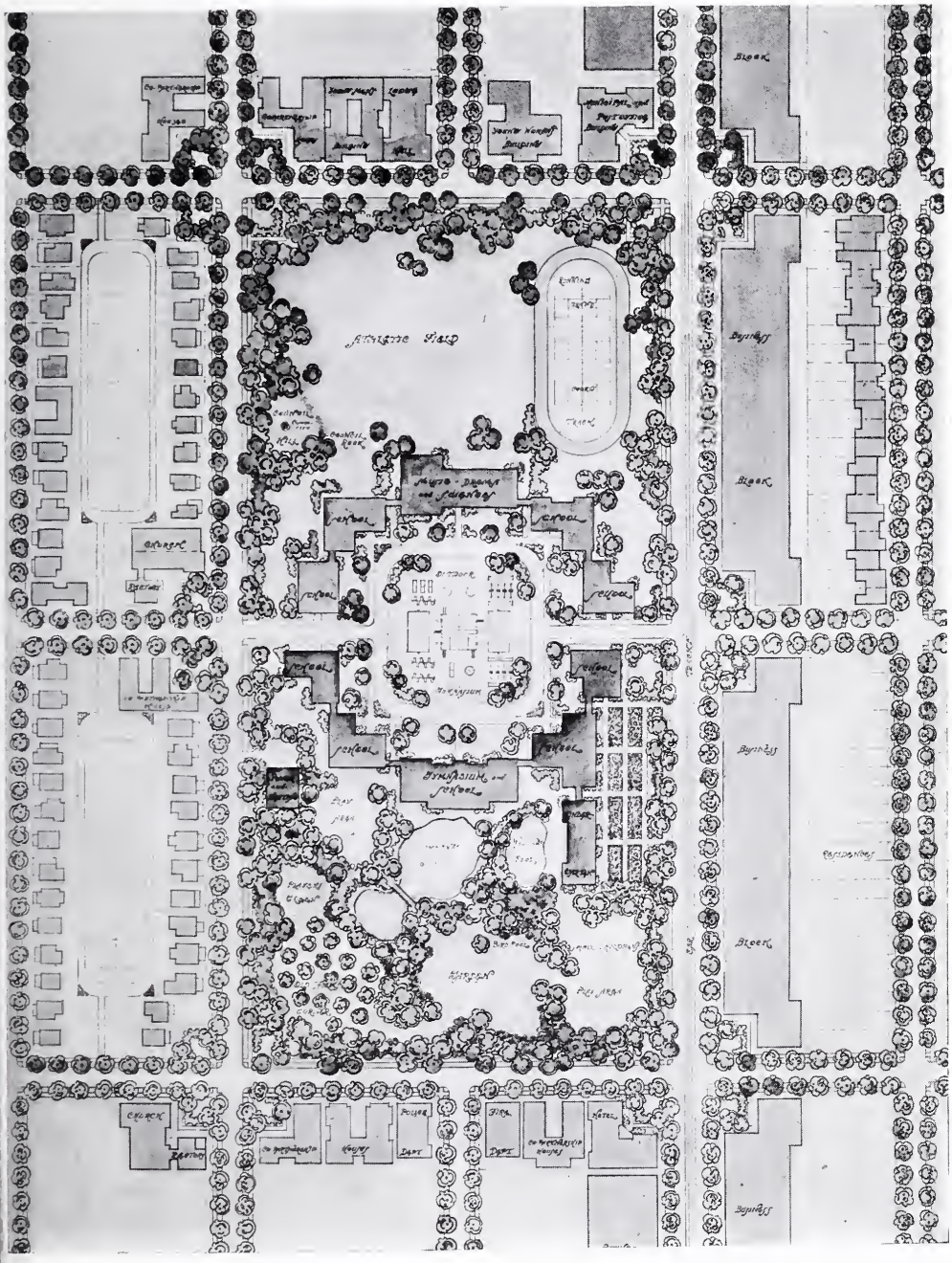
If the community house is not to be a mere club for the few already socially favored, it must be designed with some reference to the vital needs of the great body of laborers, artisans, clerks, factory-hands or neighboring farmers, as the case may be, and to the recent immigrants, who, in small numbers at least, exist in every town.

There must be the same study of the varying actual requirements of the given town or neighborhood as appears in the settlements. As it would be unwise to duplicate existing facilities, the effort should be to supply the needs unprovided for, or unsatisfactorily provided for by other agencies. In the average tenement and industrial quarter of a large city, the most pressing include a public dance hall, which may be arranged to serve also for large assemblies and amateur dramatics; decent meeting rooms for labor unions, lodges, and benefit societies; noonday rest rooms for factory girls who come from a distance and bring their lunches; an employment bureau; a day nursery for mothers who must go out to work; a milk station, dispensary, and headquarters for the district nurse. The gymnasiums, baths and swimming pool, and branch library may be combined with these if not already provided nearby. In a small, industrial city, the requirements would not be very different, except that a municipal gymnasium and bath would be less apt to exist already, and should certainly be incorporated.

In a small New England town, the nucleus of such a structure already exists in the town hall, often already used for occasional dances and dramatics, as well as for civic meetings. It would be wasteful and everyway undesirable to duplicate its facilities, for it has already in unique degree, the character of a real center of the community. The proper course would be rather to develop the town hall to fill the broader social responsibilities of government of the present. Place should be found in it not only for the select men and their administrative subordinates, but for the



DESIGN FOR A NEIGHBORHOOD CENTER, CHICAGO CITY CLUB COMPETITION. WILLIAM BERNHARD, ARCHITECT.

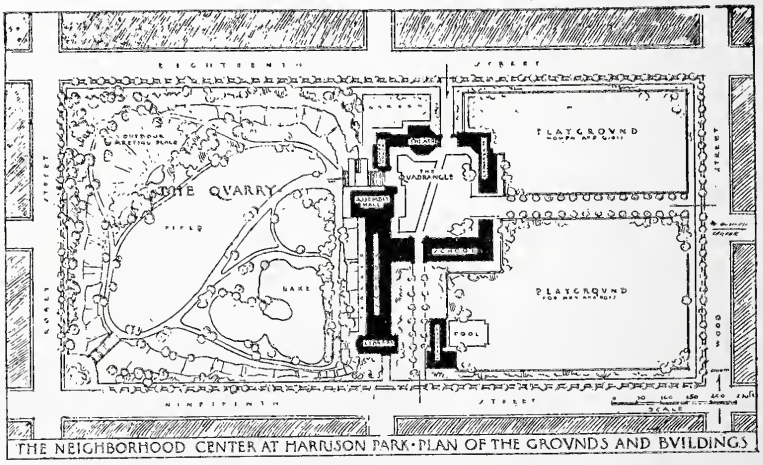


DESIGN FOR A NEIGHBORHOOD CENTER, CHICAGO CITY CLUB COMPETITION. JENS JENSEN, LANDSCAPE ARCHITECT.

welfare agencies which have grown up without official recognition, and for a new official, the social director. Possibly these officers and the larger social provisions can be secured by remodelling of the existing building, with additions. Possibly the occasion may be seized to rebuild it entirely according to the broadened idea of its functions. No building could more appropriately involve memorial features. In small towns of other sections the requirements would include the large hall which already exists in New England villages, and would provide for a civic community life which has not hitherto existed in the same degree as there.

In every case the lesson of the settlements must not be forgotten, that physical provisions alone, however ample, are less important than personnel and spirit. There must be active workers, and in the civic community centers the head workers at least must be paid by the community and paid liberally. The necessity that appointments to such positions be kept free from politics and on a high standard of character and ability is self-evident.

The true contribution of the architect to the creation of these ideal community centers of the future will not lie in visionary projects for temples of art and music preceded by triumphal arches, but in penetrating study of the pressing needs of the given community, and skillful combination of vital facilities into an organic whole.



HARRISON PARK CENTER, CHICAGO.
Joseph Hudnut, Architect.

The PLUMBING STANDARDS for the HOUSING PROJECTS of the EMERGENCY FLEET CORPORATION

By William G. Tucker

MOST of the housing activities of the Emergency Fleet Corporation were conducted along the Atlantic coast. Among the principal points around which they centered were the twenty-six shipyards and plants at Bath, Me.; Portsmouth, N. H.; Newburgh and Port Jefferson, N. Y.; Groton Iron Mines, Conn.; Gloucester, Yorkship, First Hallen and Morgan Village, Fairview Extension, Camden, N. J.; Chester, Essington, Bristol, South Philadelphia, Hog Island, Pa.; Wilmington, Del.; Sparrows Point, St. Helena, Md.; Newport News, Va.; Savannah, Ga.; Jacksonville, Fla.; Lorain, Ohio; Wyandotte, Mich.; Manitowoc, Wis.; Tacoma and Vancouver, Wash.; and Suisun Bay, Cal. The housings comprised 9,443 dwellings, sixty dormitories, ninety-five apartment buildings, twenty-seven boarding houses, eleven cafeterias, mess halls, 300 tents, temporary bunk houses, etc., all capable of sheltering 28,190 workers or 57,540 persons, including workers and the members of their families. There has been spent for sites, improvements, transportation lines, buildings, etc., approximately $67,429,000. The average cost per dwelling at, for example, the great Hog Island project, consisting of 1,989 dwellings and costing, when complete, $6,800,000, was $3,407.

The buildings of the housing projects may be divided into the following types: bungalows, generally for the south; two-story dwellings, detached, semi-detached or in groups, apartments, many with stores on the ground floor; dormitories, hotels, mess halls, kitchens and cafeterias, generally in combination with the former. The plumbing installation for the various types of buildings was surrounded with so many perplexing conditions that it had to be most carefully studied by sanitary engineering experts, who were in constant touch with the project experts. In the general scheme of designing the plumbing, the chief sanitary engineer was obliged to keep before him a number of reports issued at different times by departments of the Government, the National Housing Association, and many commissions, together with the reports issued by the chief designer of the housing division, concerning types, forms, material and quantity of fixtures and fittings, pipe, various supplies, apparatus, etc. and which were available for immediate use at the moment of designing the work. Such reports coming from so many sources were often at variance with each other, causing great confusion and much loss of time. To obviate this, a standard set of specifications was finally evolved, setting forth in a concise form all materials, fixtures and apparatus, and their quantity, which were available for immediate use; these specifications were subject to modifications from time to time as the materials and their quantities would vary.

In designing the plumbing work for the various projects, all local ordinances and regulations were followed except where compliance was clearly inexpedient, in which case the situation was called to the attention of the local authorities and modifications were sought. In localities which had no plumbing regulations, the regulations observed were usually those of the nearest and largest municipality.

The future disposition of the buildings was kept well in sight; and the design for the plumbing was made as simple, thorough and direct as possible. The plumbing work in a building is generally separated into three important divisions; the drainage system, the water supply system, of which the hot water system is a most important sub-division, and the plumbing fixtures. The plumbing layout for all buildings was considered from every viewpoint. It was the

general scheme to design this work so that each apartment and each dwelling could be disposed of separately; in an apartment building such designing necessitated a certain amount of duplication. Designing the plumbing in this manner was a great tax upon the ideals of designing to the sanitary engineer. The question of size was most important. As the building projects became numerous, plumbing material became scarce, and smaller sizes had to be employed. This applied not only to pipe, but to the fixtures themselves, with the result that while the minimum sizes employed may not have been absolutely too small, they were very near the danger point and may even pass that point as the work ages. The term plumbing unit, which will often be employed in this paper, is understood to consist of a kitchen sink, a set of laundry tubs adjoining and a bath room containing water closet, bath and lavatory.

The material of the pipe for all the drainage and vent systems was at first "extra heavy" cast iron, but as material became scarce the extra heavy pipe was used for drainage work only and "medium" pipe for the vent system, and finally tile pipe was used for drainage work outside the building, and in many cases for the work which was buried under the cellar floor. The pipe of the water system inside the building and from the street service main to the building was always galvanized steel pipe.

The house sewer from the street to the building wall for each unit of plumbing was at first four-inch cast iron medium weight drainage pipe, which was afterwards changed to earthenware pipe as cast iron pipe became scarce; this was run either under the cellar floor or on side walls to the main soil riser, where the size was reduced to three inches and carried up through the building and the roof to the open air, where the size was increased to four inches. From the horizontal run a two-inch branch was taken for the combined waste from kitchen sink and laundry tubs; and from the vertical three-inch riser, a three-inch branch for the water closet, and a two-inch branch for lavatory and bath waste. In all cases the work was so designed that the laundry tubs were placed immediately adjoining the kitchen sink and set with tops one inch above, so that their cover would act as tray and all refuse could be readily cleaned into sink. The one and one-half inch waste from the laundry tubs was connected to the two-inch waste from the kitchen sink, which was provided with a two-inch trap. The wastes from the lavatory, bath and water closet were run together or separately as the design required.

There was no venting of traps by special vent risers or branches where the fixtures were not over seven feet distant from the soil riser; in many cases this was extended to ten feet and when this did occur it was usual simply to extend the soil or waste risers to the roof and omit all venting. No special vent risers were provided for plumbing units in buildings of three stories or under. In hotels, dormitories or a combination of two or more plumbing units, it was the general practice to omit all trap ventilation, and to extend to outer air the soil or waste risers.

All roof drainage was run to leaders and discharged upon the surface of the ground. When the roof area was large, the leader drains were trapped and connected with the house drainage system. A separate drainage system was always provided for the floors and refrigerators of all large kitchens. A trapped floor drain was generally placed adjoining the dish-washing machine, in front of the refrigerators, which also drained over and into it, and adjoining the cook's serving table; and at such other locations as would facilitate cleaning. A grease trap of suitable size of masonry was always provided in connection with all large kitchens for the separation of grease from the kitchen waste before it entered the drainage system.

The water supply system for the plumbing units was run as direct as possible. From the street main was run a three-quarter inch service main into the cellar, where a gate valve and a meter were provided. From the meter a full-

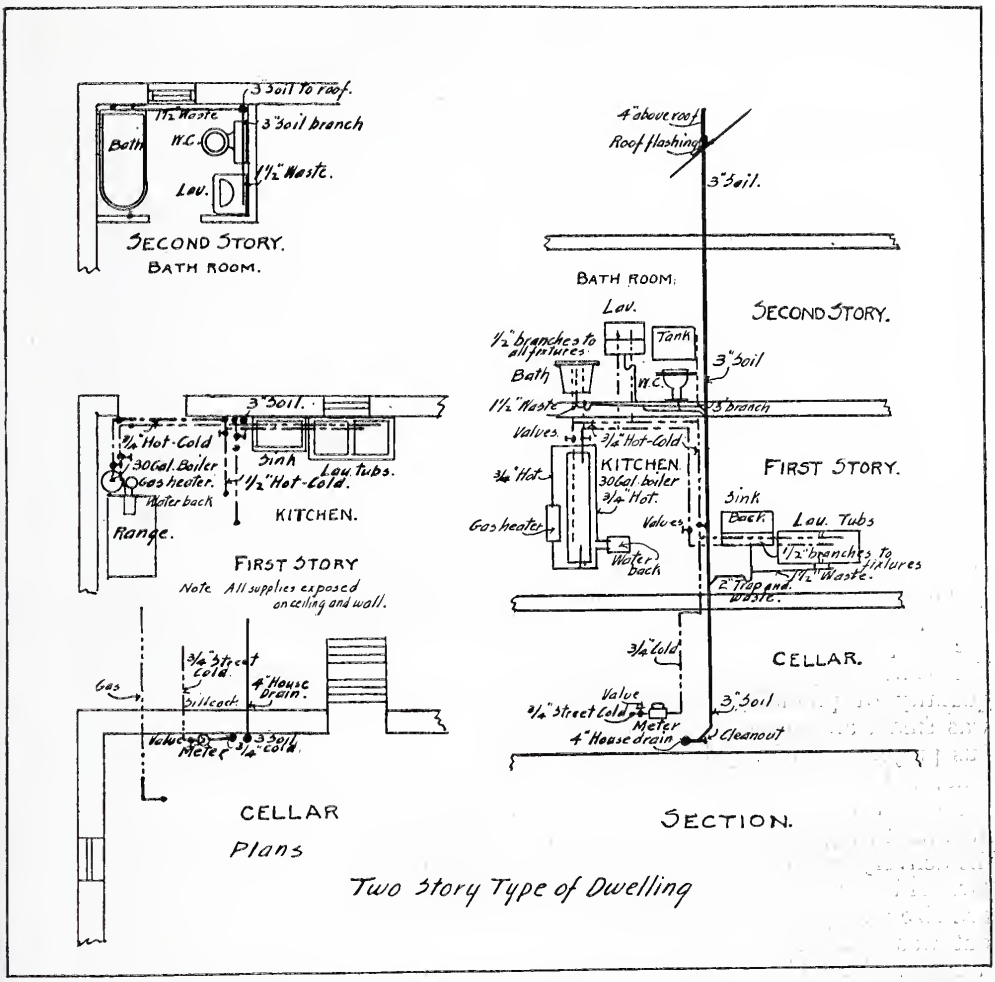


FIG. 1. PLUMBING LAYOUT IN TWO-STORY DWELLING. TYPICAL UNIT FOR ALL BUILDINGS WHERE POSSIBLE.

size main was run on the cellar ceiling and up to the bath room, from which were taken one-half inch branches to the various fixtures with a three-quarter inch branch to the kitchen boiler. At a suitable point outside of the building a sill cock for hose was provided.

The hot water for a plumbing unit was derived from a thirty-gallon galvanized steel boiler, usually placed adjoining the kitchen range with water back connection; and where gas was available, a gas water heater was always provided. In some projects the hot water boiler was placed in the cellar adjoining the furnace, with back connection, and provided with gas water heater; but as no pilot light was employed, this meant going to the cellar to start the gas heater, should the furnace not be in use. This method was soon abandoned, and the boiler was generally placed in the kitchen. From the boiler was taken a three-quarter inch branch, which was run full size to the bath room, from which were taken one-half inch branches to the various fixtures. The hot water supply for hotels, dormitories, apartment houses, kitchens, laundries, etc., where a large quantity of hot water was necessary, was obtained from ample storage tanks connected with independent heaters; or

where steam was available smaller tanks were employed, fitted with interior steam coils.

Gas, where available, was employed chiefly for cooking and for heating water. A main was taken from the street and extended into the building and provided there with valve and meter, from which were run branches to the several fixtures.

It was the general practice to valve the water main from the street at the front house wall; the hot and cold branches at the hot water boiler; those to the bath room, the kitchen sink, laundry tubs and the main supply risers and the branches to each group of fixtures.

Electric motors were employed where necessary, to furnish power for all mechanical apparatus in connection with the plumbing work for large units.

The plumbing fixtures were small, of fair quality and of ample quantity. At the inception of the housing projects by the Emergency Fleet Corporation, the quantity of plumbing fixtures available was small, and the delivery to the various projects was irregular and intermittent; and it finally became necessary for the Government to take over the plants manufacturing such fixtures, after which the delivery became dependable and regular. All fixtures installed were of standard size and quality, and the general layout was designed to accommodate such fixtures. The Government, owning all plumbing fixtures and material, furnished the requisite number and amount for each project to the storehouse keeper, who issued them to the work as became necessary. The water closets were of vitreous china deep seal washdown with siphon action, with hinged oak or birch reinforced split or oval seats and hinged covers. All closets were provided with low down tanks of vitreous china enameled iron, or other approved material with covers bolted down, and with one-half inch supply connection. On account of the scarcity of lead the lead bend was omitted, and the closet was connected directly to iron pipe. This and many other makeshift methods were not sanctioned by the engineer, but under the circumstances they had to be tolerated. Later, when lead again became available, the standard method of connecting up the fixture again became general. The closets were connected to the soil risers by three-inch branches.

The lavatories generally employed were of enamel iron, eighteen by twenty-one inches, with full depth front apron, eight-inch integral back, bracket wall supports on concealed wall hangers, nickel plated brass outlet couplings, strainer, rubber plug, chain and chain stay. The faucets were low down compression with china index handles. The supplies were of one-half inch galvanized iron. The traps were full S one one-half inch of lead, brass, or iron, with slip joint connection, brass cleaning plug, and iron or lead waste, same size of trap, extending to wall or floor.

The bath tubs were of enameled iron inside and painted outside, upon the job, four feet six inches or five feet long with width of two feet two inches or two feet six inches, with full roll rim, tub to stand free of wall and to rest upon iron legs. Tub was provided with nickel plated compression double bath cocks, with china index handles, one-half inch supplies, nickel plated chain and rubber plug, with one one-half inch nickel plated brass, combination waste and over flow, with same size iron or lead P trap.

The kitchen sinks were of enameled iron, roll rim with twelve-inch integral backs, size eighteen by twenty-four or twenty-four by thirty inches and set where isolated, thirty-six inches above floor or one inch below top of laundry tubs when set in connection with them; sinks were supported upon concealed wall hangers, and provided with full S trap with one one-half inch lead or iron waste to floor where isolated, and two inch when set in connection with laundry tubs, with one-half inch supplies, and same size compression faucets, with china index handles.

The laundry tubs generally used were of two compartments, twenty-four by forty inches where space was limited, but twenty-four by forty-eight inches was the usual and standard size of either

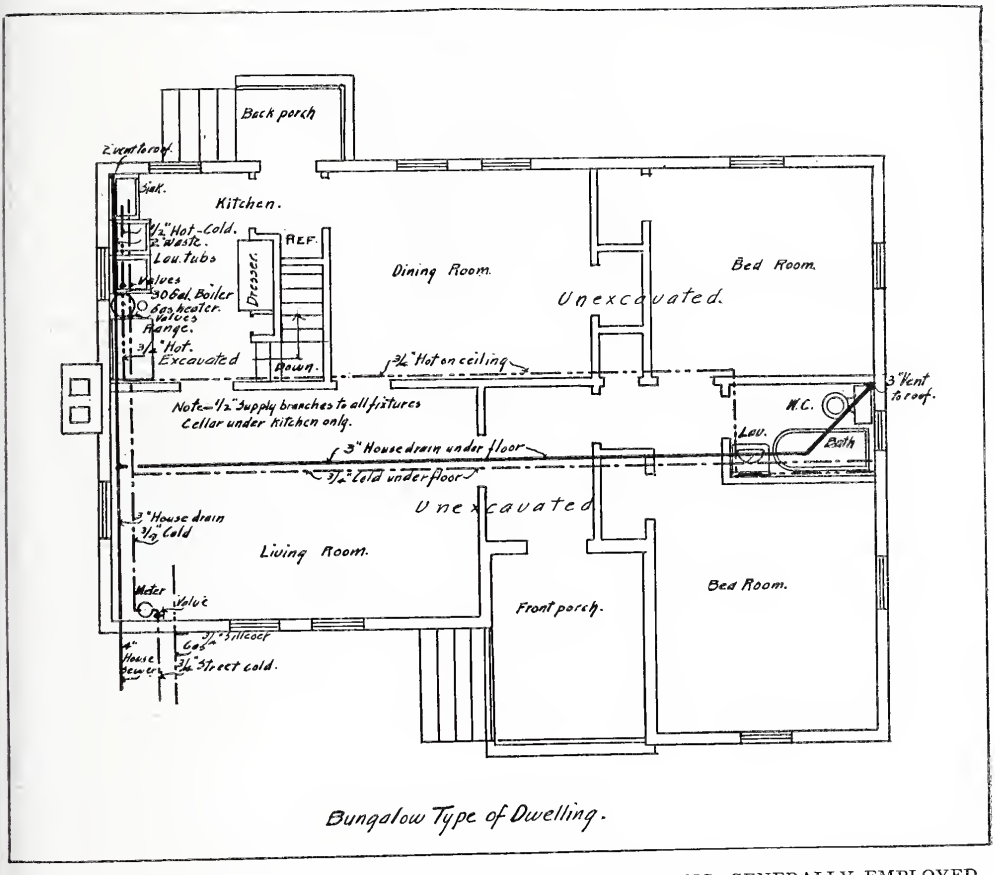


FIG. 2. PLUMBING LAYOUT FOR BUNGALOW TYPE OF DWELLING, GENERALLY EMPLOYED IN SOUTHERN PROJECTS.

slate, or other approved material with standard iron supports, one-half inch compression cocks, nickel plated strainers, chain and rubber plug, one-half inch waste of iron or lead, which connected into waste or sink when sink and tubs were adjoining each other; when isolated, waste was provided with one one-half inch S trap, of iron or lead, which dropped to flood. The tubs were provided with hinged covers of enamel iron. The laundry tubs were generally placed in the kitchen adjoining the sink, with one trap doing service for both, which was an excellent method. In the case of dwellings for the south or warm climates, the laundry tubs were placed on the kitchen porch, against that side of the building which would derive the most heat from the kitchen, and generally adjacent to the kitchen sink.

The use of polished metal in conjunction with the fittings of the plumbing fixtures was avoided if possible, but under the abnormal conditions existing during the war this could not always be done, and any material or finish was used which was available at the time of the execution of the work. The writer is opposed to the use of polished metal in fittings of plumbing fixtures, particularly where fixtures are subjected to hard use, or when placed in kitchens, laundries, public places, hotels, etc.

The most popular type of house in the various projects of the Emergency Fleet Corporation was the two-story dwelling of brick, stucco, or clapboard or combination thereof, and either isolated, semi-detached, or in groups of three, four,

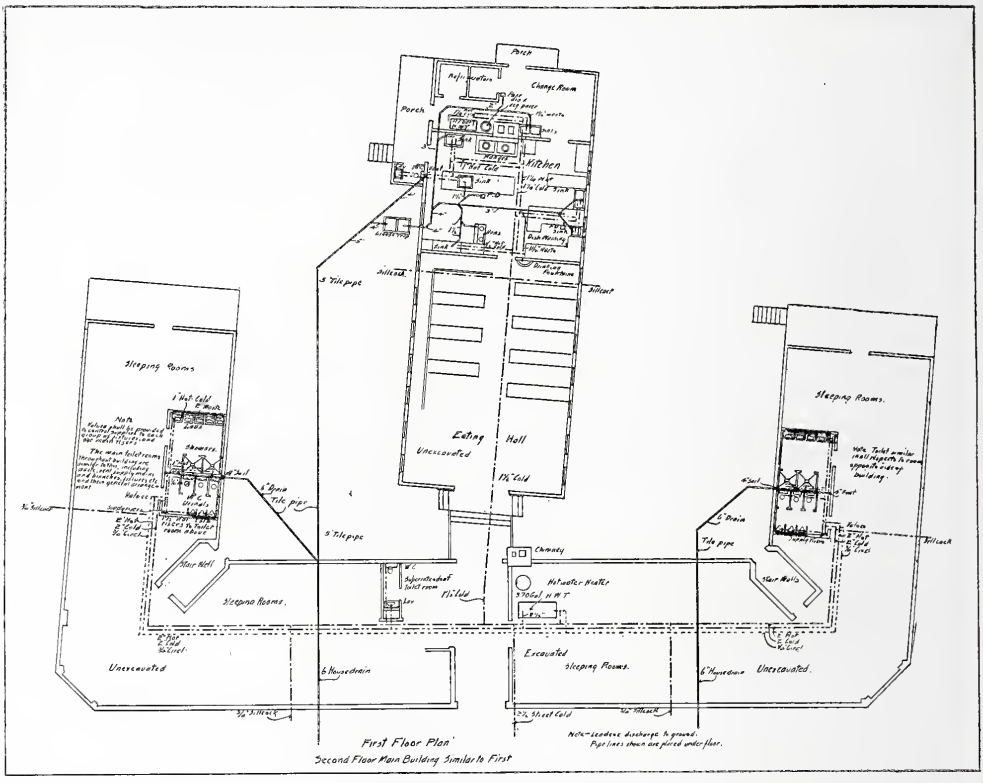


FIG. 3. PLUMBING LAYOUT FOR DORMITORY WITH KITCHEN AND MESS HALL ANNEX.

five or six, but rarely seven, and with tin, slate, or composition roof covering, and with a cellar under the entire building. In Fig. 1, is shown the plumbing layout for such a building, both in plan and section; it is what has been termed a plumbing unit, and is typical for this type of dwelling. There is shown an excellent type of bath room, situated directly over the kitchen, with clear space in front of window, which is good designing and places cost at its lowest point, doing away with long runs of pipe, requiring less heating, and confining the noises from use of fixtures to the least objectionable section of the building. The drainage work shown is most direct, with short branches, and with small sizes required. The supply system is also most direct; there are shown the meter, the controlling valves, the sill cock and the supply branches to all fixtures with their size. The boiler is shown with the gas heater and range waterback and runs and branches. The location of the fixtures was carefully considered, and their positions as shown seem to be the most logical from all consideration. The plumbing layout was the simplest in design, the lowest in cost, the most direct, required the least amount of cutting or carpenter work to install, and was so generally excellent that this type of layout was employed wherever possible and upon all work.

The bungalow type of dwelling is shown in the Fig. No. 2, and consisted of only one story upon which was planned the kitchen and dining room, bath room and sleeping rooms. It was generally built of clapboards with composition roof, and had a cellar only under the kitchen section. This type of building was used genarally for the southern projects. The plumbing layout was most simple, direct, and of low cost, but the

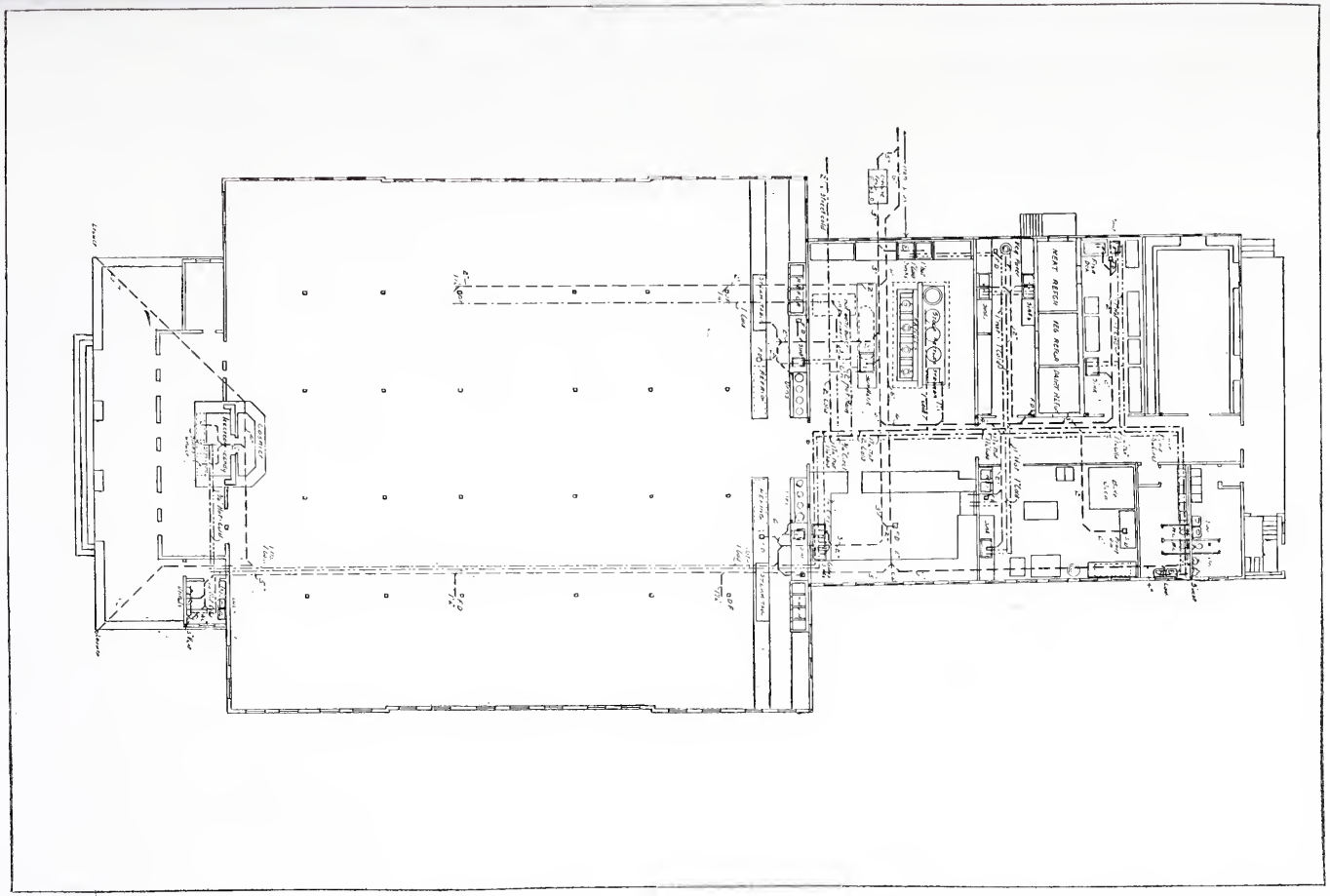


FIG. 4. PLUMBING LAYOUT FOR KITCHEN AND MESS HALL SEATING ABOUT FIVE HUNDRED.

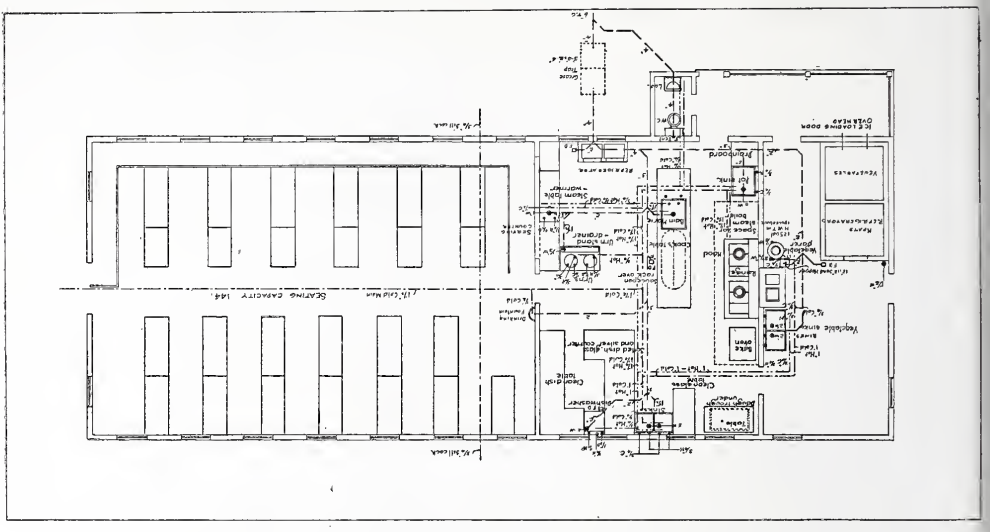


FIG. 5. PLUMBING LAYOUT FOR KITCHEN AND CAFETERIA, JACKSONVILLE, FLA.

building itself was more expensive than the two-story dwelling of the same cubage. The plumbing unit installed was practically the same as that for the two-story dwelling, including drainage, water system and fixtures. In the example shown, a poor feature of the plumbing layout is seen in locating the bath room so remote from the kitchen and hot water boiler, necessitating long runs of pipe and the placing of pipes in objectionable positions and requiring more heat for heating the water.

An excellent example of type of dormitory generally employed in the various housing projects is shown in Fig. No. 3. These buildings were substantially built (generally two stories high) and were self contained. A cellar of limited size was provided to contain only heating and hot water apparatus and the necessary fuel. These buildings were designed generally for the use of men only. The sleeping rooms were small, the toilet rooms were carefully designed, and two were provided for each story; each toilet room generally contained three water closets, three urinals, five lavatories, and two showers; no lavatories were provided in the sleeping rooms, a small toilet was provided for the superintendent. Annexed to the dormitory was the kitchen and mess hall, which were designed large enough to afford accommodation not only for the occupants of the dormitory, but for the workmen upon the project as well. The plumbing was most carefully designed, the sizes were fair, the drainage was well laid; the plumbing was generally divided into several systems, for economy and good designing. The cold water supply was taken from the street main and run usually as shown, with valved branches connecting with the main risers and each group of fixtures.

The hot water was obtained as a rule from an independent storage tank of ample capacity with its heater. Ample valving was provided, sillcocks were placed at advantageous points and at suitable distance apart. The leaders from the roof drainage discharged upon the ground. The plumbing fixtures, their connections and arrangement were generally similar to those provided for the two-story dwelling (Fig. No. 1).

The so-called hotels were very similar in construction and interior arrangement to the dormitories, but contained greater refinements and were designed for the men and their families. Each sleeping room was provided with a lavatory; otherwise the plumbing arrangement was similar to that described for the dormitory.

The apartment houses were substan-

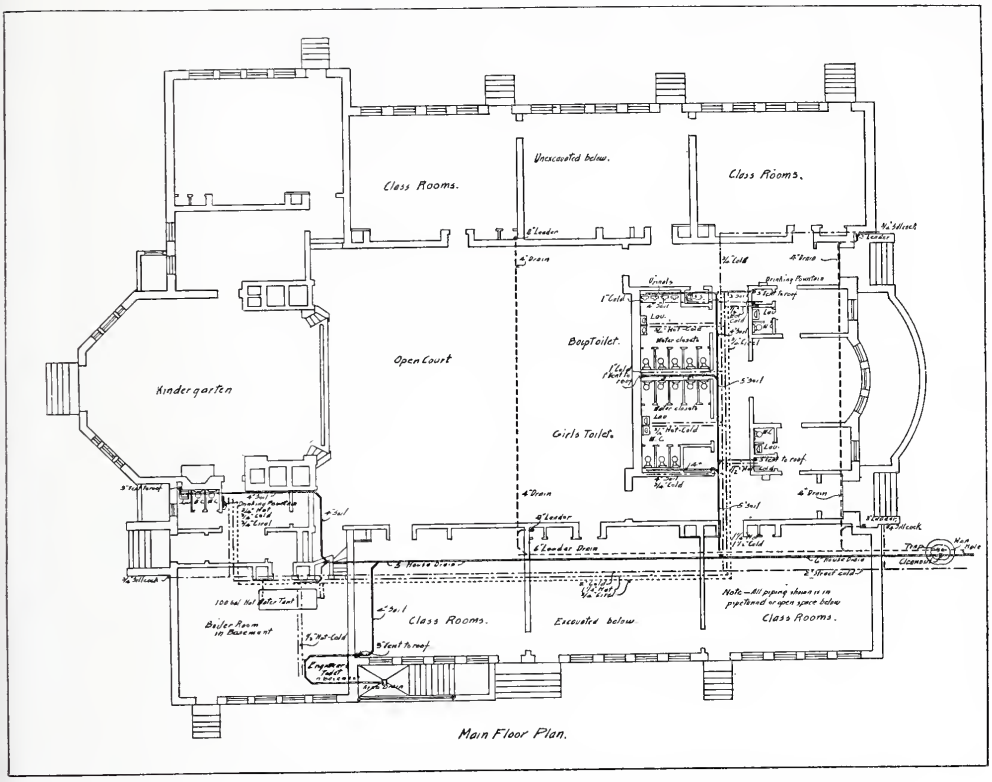


FIG. 6. PLUMBING LAYOUT FOR SCHOOL HOUSE, PORTSMOUTH, N. H.

tial buildings, generally two or three stories in height and were designed to accommodate a family on each story; each apartment contained its own kitchen and laundry, bath room and living rooms. Some of the buildings contained stores on the ground story, at the back of which was provided a toilet room containing lavatory and water closet, with sink outside adjoining. The heating and hot water for each apartment was obtained from central plants situated in the cellar. The plumbing was generally as heretofore described.

The kitchen and cafeterias, dining or mess halls, sometimes isolated and sometimes in conjunction with the dormitories and hotels, were most carefully designed. The kitchens were complete in every respect, and were provided with the latest improved equipment. In Fig. No. 4 are shown a kitchen and mess hall complete, with a seating capacity of approximately five hundred. This was a large isolated unit. Adjoining the main entrance to the building is the toilet room, small, but of fair proportions; at the center is placed the ice cream and candy stand, with sink for washing facilities. At four points shown are provided drinking fountains, with their cold water supplies and drainage. The cafeteria has refrigerators for milk, butter, fruits, ice cream, etc., and sets of urns for hot coffee. The dish-washing department has ample counter space with sinks. The bakery is of ample size, and is provided with a necessary equipment for its proper use, including the making of ice cream. The fish department is separated from the rest of the kitchen, and has its own refrigerators and sinks. The kitchen proper has its battery of ranges, stock kettles, refrigerators for meats, vegetables and fruits and dairy products, ample sinks and such other equipment as is necessary. Adjoining the kitchen is the change room for the help, with its

lockers and toilet facilities. This building is self-contained and has its own hot water plant of ample size located in a small cellar, with mains and branches running to the different fixtures. The street cold water supply is two and one-half inches and runs to supply all fixtures, apparatus, etc. The floor and refrigerator drainage is kept separate from the general drainage. The drainage and water supply systems are of ample capacity for the demand placed upon them. In Fig. No. 5 is shown a unit similar to that shown in Fig. No. 4, but more compact, condensed and of much smaller size, and with certain omissions in equipment. This unit was most popular and was generally installed at all housing projects.

The large school house for Portsmouth, N. H., shown in Fig. No. 6 was of large size and designed from the latest data available concerning cubic air space per pupil, ventilation, heating, sanitary requirements, material of construction, and such other requirements as would tend to make the building a model and one to be followed in future designing. Toilet rooms of modern design were provided for the boys, girls, kindergarten and teachers. The hot water plant was situated in the boiler room and consisted of one-hundred-gallon storage tank with its independent heater, from which run a main with branches to different groups of fixtures. The main toilet rooms were provided with an air space and a utility corridor back of the water closet; this was good designing. On account of the large roof area, the roof drainage system was separated from the main drainage. The plumbing drainage, water supply and fixtures were similar in design to those already described and followed closely the practice of designing heretofore described.

The question may be asked, "Is anything to be learned from these plumbing layouts?" They have the permanent merits of simplicity, compactness, low cost and economic designing. It was the aim of the writer to standardize the plumbing work for all the buildings, to popularize the work so that a complete plumbing unit, with piping fixtures, etc., could be bought by a person for his house from a catalogue; and this seems about to be accomplished. The question of omitting the vent risers for the drainage system, which was so largely followed by the Fleet Corporation, may have had results, for the Building Department of New York City has just passed an amendment to its plumbing code allowing the omission of the vent riser in buildings not over eight stories in height, providing the soil or waste riser be increased one inch in diameter, and permitting the omission of trap ventilation when the plumbing fixtures are not over five feet from these risers, provided an approved anti-siphon or deep seal be provided. The economic designing of the plumbing for the various housing projects was primarily brought about by the scarcity of material; and the writer hopes that the lesson may not be forgotten and may tend to less expensive designing and bring about cheaper installation. But under no consideration should economy be allowed to impair security, thoroughness, safety and carefulness in plumbing designing.

RENAISSANCE ARCHITECTVRE AND ITS CRITICS

By A.D.F. HAMLIN

Part III. Imitation and Originality.

IN the sweeping indictment which certain critics have sought to bring in against Renaissance architecture,* the charge most frequently repeated is that of copying or imitation. It is asserted or implied that Renaissance architecture as a whole lacked originality and creative imagination. It is asserted or implied that the Italian architects after 1420 were more concerned with reproducing Roman prototypes than with designing rationally. Under the spell of the revival of classical studies, "professing to aim at restoring the 'good ancient manner,'" they sought to reproduce the antique architecture. They forsook the right path of logical design for the false path of copying, veneering the exteriors of their buildings with forms borrowed from a dead style. Fergusson calls all the post-Gothic styles Copying or Imitative Styles; all previous styles were Truthful Styles. He declares that the sixteenth century was the dividing line between the two distinct kinds of architectural art, all buildings subsequent to 1500† demanding the application to them of principles of criticism and laws of taste quite different from those invoked for all preceding ages of the art ("Modern Architecture," p. 40). "Since the revival of learning," he observes, "all architects have been composing in a dead language."

Fergusson's influence was for over a half-century very powerful among English and American writers and readers, for this book was the first, and long the only, serious effort in the language to discuss critically and comprehensively the architecture of modern times. When it appeared, in 1862, architecture in England was in a condition which might well excite satirical criticism. In tracing back to its origins the archæological Gothic of that time, Fergusson felt that he had found the source of all its lack of vital origination in the Renaissance movement, and he included under a blanket indictment the whole product of the centuries since the Revival of Letters, as being all alike tainted with the vices of insincerity and unthinking imitation—it was a critique of protest, an outburst of artistic indignation; but it was not always fair or consistent criticism, and its errors of judgment and appreciation have misled a host of later writers. Mr. Russell Sturgis declares in his "European Architecture" (p. 369) that the Pazzi Chapel at Florence was "the beginning of modern imitative architecture," and on another page that the method of the early Renaissance architects "seemed to them . . . the Roman, and therefore the only right way." In other words, the early Renaissance started modern architecture on the path of imitation by making Roman architecture its model and norm. Mr. A. K. Porter and Mr. H. H. Statham, in their strictures on Roman architecture, lament the perpetuation of its errors by the Renaissance. It is the "depraved taste" of modern times, according to the former, that has perpetuated the Roman combination of arch and columnar order, which combination Mr. Statham declares to have "left a long legacy of falsehood to architecture, a falsehood revived at the Renaissance and still frequently perpetrated in obedience to the tyranny of custom."

Professor C. H. Moore in the Introduction to his volume on the "Character of Renaissance Architecture" observes that "a consciously retrospective motive can hardly be a vital force in artistic

*See the Record for August and September, 1917.

†Fergusson is confusing in his treatment of the centuries. He dates the corruption of architecture in one place from the Reformation, that is from 1517; in another, from the revival of learning, which must of course include the fifteenth century; while in still other passages he absolves the whole Early Renaissance—that of the fifteenth century—from the charge of copyism.

development, and the direct attempt . . . to shape the arts after classic models was an unmixed evil," but he later in several instances finds fault with the Renaissance architects for *not* following those models more closely. Against any claim that the Renaissance deviations from servile copying of the antique were evidences of independence and originality, he contends that "there is no justification for this view. As to essential forms of building there were no new conditions to be met. In seeking to change architecture superficially by an application of classic details the neo-classicists erred. They ought to have seen that classic details do not lend themselves to new uses. Their very perfection for classic use unfits them for any other. To distort and misadjust them as the Renaissance did is not to adapt them. There was no true adaptation of classic elements in Renaissance design. Such adaptation involves creative modifications which so transform original elements that to a superficial view they are not recognizable in the resulting forms."*

Let us pause for a moment to examine this reasoning. It is noticeable in the first place that it is deductive and not inductive; it assumes certain propositions *a priori,* and derives its conclusions from these; if the facts do not fit the theory, so much the worse for the facts. Moreover, terms are used without definition, in a manner which lends itself to very illusive reasoning. Thus: "A consciously retrospective motive can hardly be a vital force," etc.; what is here meant by "consciously retrospective"? For in one sense of these words such a motive has been a vital force in all artistic development; it has always built upon the past the foundations of its future. Whether it is to be a vital force or not depends upon the nature and the objects of this retrospection. The fatal character of the retrospection is first assumed, and all Renaissance architecture is then criticised on the basis of this assumption. "The direct attempt to shape the arts after classic models was an unmixed evil"—here again is a pure assumption; whether the facts support it is the very question at issue. "Classic details do not lend themselves to new uses"—another pure assumption, contradicted by the experience of two thousand years. "Their very perfection for classic use unfits them for any other"; what is here meant by "classic use"? Does the critic contend that a Corinthian column is less suited to carry the entablature and pediment of a portico to-day than in the Augustan age, or a classic cornice less effective and beautiful now than then? "To distort and misadjust them as the Renaissance did"—this judgment is based on the singular assumption that "there was no true adaptation of classic motives in Renaissance design" because "such adaptation involves creative modifications which so transform original elements that to a superficial view they are not recognizable in the resulting forms." That is to-say, no adaptation is "true" that is not carried to the extreme limit of change; and so, because the critic can recognize the classic origin of these details the Renaissance architects must be denied any credit for creative originality! One cannot help feeling, moreover, that the learned critic, in attempting to involve the Renaissance in the dilemma between directly attempting to follow classic models on the one hand—an unmixed evil; and attempting on the other to modify and adapt them—which was only to distort and misadjust them—has involved himself in another dilemma: there were no new conditions to be met, yet the classic forms were to be avoided because they were not fitted for new uses!

Leaving aside for the moment the debatable question as to the fitness of the elements of classic architecture for modern uses and as to whether the Renaissance variations and modifications of them were or were not distortions and misadjustments, one is tempted to ask whether the critics who thus seek to condemn all Renaissance architecture as fundamentally wrong in its spirit, ideals, method and performance, ever quite grasped the full implications of

*"Character of Renaissance Architecture," p. 247.

their assertions. We have a right to ask for more convincing evidence than they adduce to persuade us that suddenly the entire civilized world reversed its habits of thought, and that never since a certain date has it exhibited the qualities and capacities displayed in all its works of architecture for thousands of years before that date, nor observed the laws and principles which through all those thousands of years had been universally controlling. "We are asked to believe," says Mr. W. J. Anderson,* "on high authority that while the course of true architecture ran smoothly from prehistoric times to the end of the Gothic period, it there ended, and copyism or resuscitation of dead and unmeaning forms has since continued. In other words, that the harmony which ever subsists between the condition of man and his intellectual productions was suspended by human volition about the fifteenth century, and that architecture has from that time failed to be a natural issue of a people's civilization and a record of a nation's history."

One would suppose that to the sincere critic, anxious to discover the true significance and inner content of the art he was dealing with, the spectacle of a great and almost world-wide change in the forms and outward aspect of architecture would suggest an effort to find some more rational explanation than the easy but incredible theory of a sudden and universal extinction of logic, common sense and artistic honesty. In all this sweeping condemnation, as expressed by Professor Moore, by Ruskin, by Mr. Cram and Mr. Porter, there appears a hostile animus in which alleged moral delinquencies are associated with artistic ineptitudes to discredit the Renaissance and all its works, in a spirit that makes the impartial examination and presentation of the facts of Renaissance architecture quite impossible. With Mr. Anderson's protest against this whole attitude, I think all careful students of the Renaissance whose judgments have not been warped by a blind and uncritical worship of Greek or medieval art will cordially agree. "There is thus," Mr. Anderson continues, "little justification for the separate classification of the Renaissance as an imitative style in harsh contradistinction to the 'true styles' of classic or medieval times. It was unquestionably an embodiment of the temper of the time, and it was precisely on that ground that it had life and became so important a part of the world's architectural history." And although its details were directly or indirectly derived from antique sources, he claims "that originality has never been displayed in greater degree than by the architects of the early Italian Renaissance." (Pp. 4-5 of work cited.)

Indeed, when one surveys the marvelous artistic fertility of the Italian Renaissance from 1420 to 1550; the extraordinary richness, variety and beauty of its productions in all the arts; the keenness and vitality of the Italian taste and of the intellectual life of the time, it becomes impossible to accept the verdict that it was an age and an art of dead copying, of slavish imitation, of the abandonment of all creative design and original thought in favor of a futile revival of dead forms.

This imputation of "copyism" rests on an uncritical and superficial observation of the facts, and a fundamental misconception of architecture itself. As I tried to point out some four years ago, (in the "Record" for May, 1915,) the tradition of architectural criticism inaugurated by the English writers of the Victorian period focused attention on the details, and chiefly the exterior details, of architecture. This narrow and superficial conception was later modified by the idea of structural logic developed by Viollet-le-Duc. To this day there are writers who cannot see beyond, behind, underneath or over their own particular interpretations of these two elements, or recognize that these are only two among the many factors that go to make up architecture as a whole. But to apply in detail the considerations of a structural logic based on the type of the stone-vaulted cathedral of the Ile-de-France to the civic, ecclesiastical and palace architecture of the Renaissance is

*"The Architecture of the Renaissance in Italy," p. 4 (4th ed.).

irrational, because it ignores the differences of the problems themselves, and of the conditions, materials, environment and purpose of the two kinds of architecture, and makes no allowance for or recognition of the real essence of the genius and spirit of the Italian Renaissance, or of changed requirements due to the inevitable change in human society and government. It seems to find fault with the Italian Renaissance architecture for not expressing the spirit, conditions, aims and civilization of its time by the same processes, method and structural reasoning that served the French builders of another kind of building in the Middle Ages, or the Greek builders of the time of Pericles.* Nothing in the world need prevent any critic from preferring a Gothic cathedral to a Renaissance palace or church, or saying that he enjoys Gothic architecture more keenly than that of the Renaissance. There are many good reasons why he may do so, as I clearly set forth in the "Record" for August, 1917. But such a preference is no justification for denying common sense, honesty and originality to the other kind of architecture. True criticism is not the mere expression of personal predilections; it is the careful analysis of the subject in the light of all that we can know about it, with due recognition of the conditions that produced it, and the final verdict must be based on criteria directly pertinent to these conditions. Moreover, the analysis should be as sympathetic as possible, because only by a sympathetic study can we attain to a real understanding of its inner nature. By a sympathethic study I mean, of course, a study which puts aside prejudice and preconception, and approaches its subject with a mind open to favorable views, as well as to considerations on the other side.

This sympathetic attitude, this sincere effort to get at the inner spirit of Renaissance architecture, to find a rational explanation of what may at first sight seem contrary to one's own reasoning on the problem, this readiness to appraise impartially the merits and virtues of Renaissance work is singularly lacking from most of the writings of the critics to whom I have referred. To see in all the marvelous architectural productions of the fifteenth and sixteenth centuries little but neo-paganism, reversion to a dead past, sham and copyism and untruthfulness, would seem to be evidence of a narrow and prejudiced judgment.

II.

The charge of unoriginal imitation or "copyism" results from a too exclusive attention to exterior details, coupled with a loose understanding and use of the words "copy" and "imitate," as applied to architectural design. The carrying over of form-elements from one style and age to another has been a constant phenomenon of architectural development. It is met with in the architectures of antiquity, as well as in medieval and modern times. Borrowed forms are found in all styles, but they invariably undergo adaptation and transformation, and are used in wholly novel combinations, and in a new spirit; that is, they become elements of a new style. In a former article* it was shown how the Romans drew from Greek prototypes many of the form-elements of their architecture, and how these, although their Greek origin is, in many cases, quite obvious, were,

*With reference to the importance of structural logic as a criterion in architecture, Professor Moore, in a footnote to his article in the "Record" for November, 1918, charges me with inconsistency because, after endorsing the principle that structural character is a primary consideration in architecture and the proper basis for critical estimates," I later abandon it by supporting what he calls the "spurious Gothic of the Middle Ages in which the principle is violated." Now apart from the fact that I do not abandon this principle, but on the contrary expressly declare that in these later works "structural logic was not ignored nor even forgotten; it is there, underlying the fundamental design," my readers should recognize that I have nowhere admitted structural character to be the sole primary consideration and the only proper basis for critical estimates of the art. I have on the contrary always insisted that it is but one of several factors in such estimates; that construction, planning, purpose or function, available materials and decorative details must all together be considered, not any one of them alone. The further remark in the foot note that "the structural and esthetic elements cannot be separated" in living art, in no wise contravenes my contention that esthetic logic demads equal consideration with structural logic. Inseparably as they certainly are associated in all great works of art, they may yet be quite distinct subjects of thought. Professor Moore's contention seems to be, "The two are inseparable, therefore I will ignore one of them."

*The Record for May, 1915.



FIG. 1. PORCH OF SAN GIORGIO IN VELABRO, ROME.
Twelfth Century. Classic Survivals in a Medieval Building.

to a great extent, transformed, and made to take their place in a wholly new kind of architecture, purely Roman in character, as far removed as possible from an imitative or copying art. The architects of the Renaissance made a similar use of the Roman elements, adhering, in the later phases of the movement, somewhat more closely to the Roman types than the Romans did to the Greek, but like the Romans employing the borrowed or suggested details in wholly new combinations to produce an architecture as different from the Roman as that was from the Greek; different in aspect, in method, in purpose, in character, in construction, in inspiration, in all that constitutes the real substance of architecture.

This preoccupation with façades and details distracts the critic's attention from the larger aspects of his subject, blinding him to the novelty and originality of the Renaissance architecture as a whole, to the wholly new types of buildings which it created, to all its dignity, spaciousness and splendor of interior design, to the wonderful variety, ingenuity and beauty of its planning, to the largeness and stateliness of its architectural effects. One may concede much to adverse criticism of details, and yet maintain with justice a high degree of architectural merit in the design in which they occur. And whether a feature or detail derived originally from antique art, is or is not rightly used and successfully adapted depends far more upon the total effect produced than upon the closeness of its resemblance to some more or less remote classic model.

It is furthermore objected that the Renaissance, in thus resorting to antiquity for its models, was turning its back upon the contemporary Italian Gothic of the time. The Italians of the fifteenth century are said to have thus broken the continuity of their own art, reversed the stream of progress, and deliberately resorted to an extinct civilization for models to follow. Whereas, in the "Truthful Styles," the borrowing of forms was always from contemporary or just-ex-

piring styles, these architects sought to revive a dead past, because of their own lack of creative originality. Should not this conscious, deliberate deriving of forms and details from a buried past be called copying?

There is both truth and error in this charge, but more of error than of truth. During the fifteenth and sixteenth centuries there was certainly an increasing use of forms and details drawn from classical antiquity, accompanying the increasing study of ancient history and literature, philosophy and art. There was a widespread desire, often expressed, to "restore the good ancient manner." That this did not mean to reproduce the ancient types of buildings, the works actually executed plainly show; the meaning was evidently that the Italians of those days, dissatisfied with the foreign and Gothic manner which they had for more than a century been seeking to assimilate, longed for the stateliness and dignity, the largeness of scale, the breadth and repose of effect, which they now recognized and admired in even the ruins of the Roman monuments. They studied enthusiastically the means by which the Romans of old had attained and expressed these qualities, more at first for suggestion than for close imitation. Pilasters, columns, entablatures, round arches with archivolts, and the antique ornaments of moldings and arabesques came more and more into use in the palaces and churches of Italy. In the sixteenth century the resemblance to the Roman prototypes became more complete, as the study of the antique advanced in scholarly accuracy. But these details, in the first place, are not the architecture in its broader and truer sense; they are the materials and elements and trappings of the architecture. Roman architecture was not merely the Orders and the pediments and arches of Rome; it was what the Roman did with these forms and elements. Renaissance architecture is what the Renaissance did with these elements, from whatever source taken. The details and ornaments they used, however much or little they resembled those of antiquity, were but the alphabet with which they wrote their poems in stone or brick, or marble.

Partly with these Roman details, which they freely adapted to the needs of their own problems, they created a wholly new architecture, different in purpose, application, spirit, composition and decorative effect from any and all Roman models. It was a new architecture because a new spirit had entered into art and life; but it was far more closely related to what had immediately preceded than to the Roman architecture which it is said to copy or imitate. The orderly evolution of this architecture in Tuscany first, then throughout northern Italy and Rome, was a true and vital expression of the evolutionary changes at work in Italian life and thought. It drew inspiration from the revived study of classic literature, life and art; but inspiration and copying are distinct and opposed phenomena. Roman architecture was not copied until the Roman Revival of the late eighteenth and early nineteenth centuries, and by that time the original Renaissance movement was extinct.

The charge that the Renaissance Italians arrested and turned back the normal progress of architectural development by reverting deliberately away from the existing Gothic of their time to a dead and buried past, is simply not true. It ignores the plain fact of art-history.

In the first place, it ignores what the tyro-student ought to know, that it was not the Renaissance but the invasion of Northern and Western Gothic that severed the normal continuity of Italian architectural history. The often rude but always virile Lombard style which had developed through six centuries, and the Basilican style that still persisted in Rome, were strangled by the foreign fashion introduced by Cistercian monks and French and German builders in the thirteenth century. This Northern and Western fashion was alien to the Italian taste and the Italian climate and the Italian traditions. "The invasion of the Gothic architectural forms from the North was a fateful event, a calamity if you will, but a calamity only in so far as it befell men incapable of dealing with



FIG. 2. BAPTISTERY. FLORENCE. EXTERIOR DECORATED ABOUT 1294. NOTE PERSISTENT CLASSIC ELEMENTS.

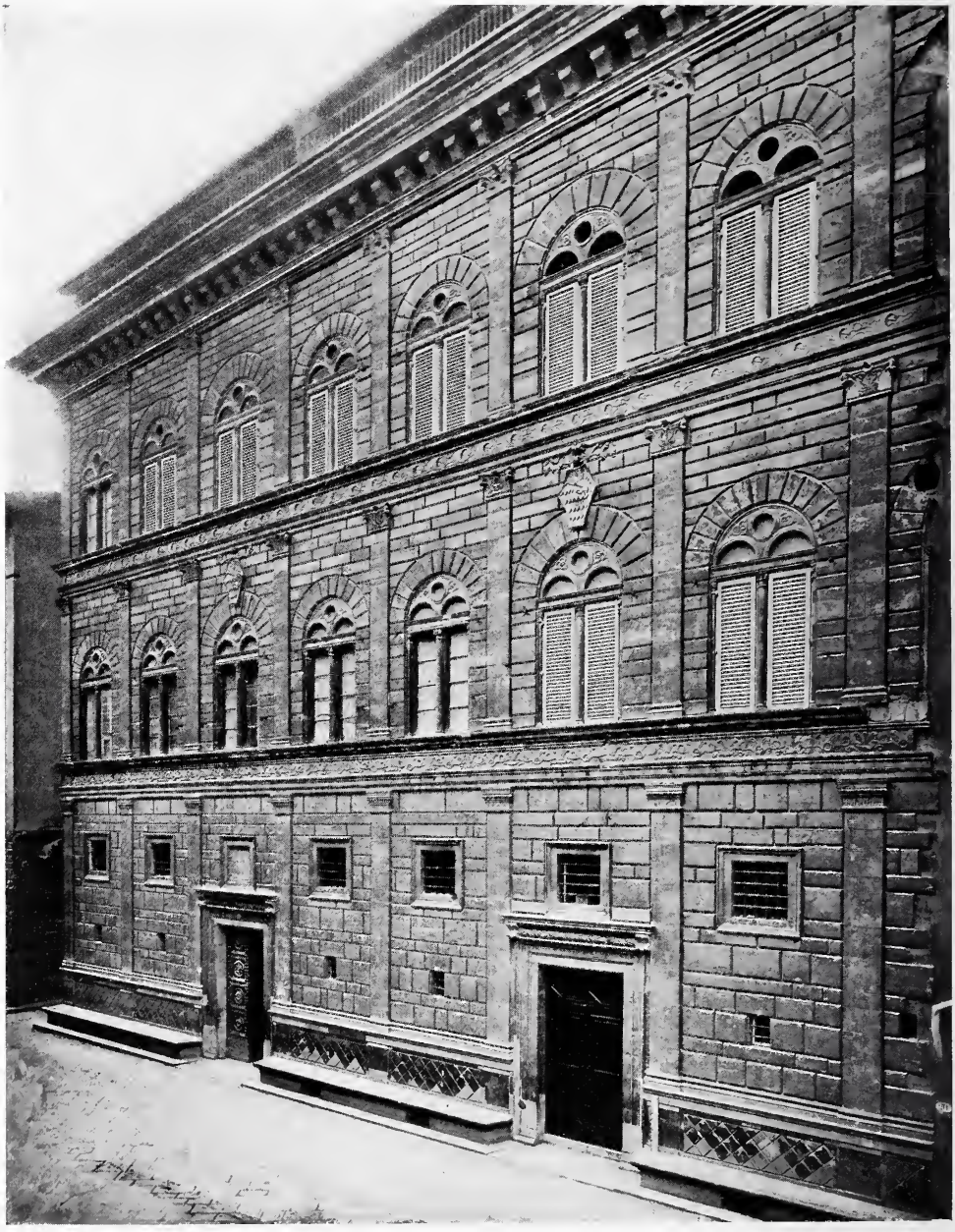


FIG. 3. RUCELLAI PALACE, FLORENCE.



FIG. 4. CAPELLA MALATESTIANA (SAN FRANCESCO), RIMINI.

it" (writes Burckhardt in "Der Cicerone"*). "If one recognizes in the Baptistery of Florence, for example, that the twelfth century was well started on the path of the development of a harmonious beauty in the use of antique forms, he will soon be convinced that under the invading Gothic forms of a somewhat later date the originally underlying tendency persisted unchanged and expressed itself in the noblest fashion under this external shell." In other words, the Roman tradition, though feeble, was still vital throughout the entire Middle Ages in Italy. So far from having ever perished, it was active through the whole duration of the Italian Gothic style. It manifested itself alike in the decorative details, the structural methods and the handling of scale. In Florence and Sienna and Rome, in Pisa and Pistoia and Orvieto the round arch with archi-volt and square-sectioned soffit, the Corinthian capital, the three-membered entablature, the profiles and ornaments of moldings, the veneering with marble, the use of polychromatic materials and of inlay and mosaic, the delight in broad wall-surfaces, the preoccupation with decorative effect, and the Latin or Basilican plan and type of church, are to be encountered in buildings of all the centuries from the eleventh to the fifteenth. The Renaissance architects sought to revive no dead tradition. They revitalized and liberated the natural racial and national tendencies inherited by an unbroken descent from the Romans of antiquity. The unbroken continuity of this inheritance the hostile critics generally ignore, but impartial students have recognized it in increasing numbers since Burckhardt wrote. Anderson asserts it in the work already cited, in which he refers to the Byzantine, Lombard and Romanesque styles of Italy as varying modifications of "the Latin element which lay underneath, and which in the

*Sixth Edition, Leipzig, 1893; Part II, p. 47.

fifteenth century found, in the revivification of purely Roman principles, the one outlet which was congenial to it." And indeed, one has only to look at the interior of Sienna Cathedral, or the exterior of the Florentine Baptistery, or the details of the "Mandorla" door of the Duomo of Florence or those of a score or a hundred other medieval buildings, to realize the pervasiveness and strength of this medieval classicism. What had been an imperfectly felt tendency, obeyed for the most part unconsciously, became in the fifteenth century a deliberate and intensified purpose. Even the appearance in the dawning years of that century of the mighty genius of Brunelleschi, who resumed in himself all the tendencies of his time and felt powerfully the pulses which had only begun to stir his whole generation, simply gave definiteness of direction and intensity of purpose to this existing force, and started men to studying the original sources of the inspiration which their predecessors had felt, though less strongly, through a thousand years. But in the whole range of Brunelleschi's work one looks in vain for any trace of copying of any Roman building or Roman composition. Even his most classic details of capitals and moldings are hardly more "correct" than many to be found in works of the fourteenth and preceding centuries in Rome and northern Italy.

III.

In support of the general charge of copying instead of originating, alleged by the hostile critics against the Renaissance, four or five buildings are commonly selected as examples of the deliberate copying, reproduction, imitation or "following" of particular Roman buildings in a manner and to a degree which preclude any credit for original design. I have been unable to find, in the whole vast range of the buildings of the fifteenth and sixteenth centuries in Italy, more than a half-dozen on which these critics are agreed as significant examples of this deliberate imitation.*

Many others are cited as being designed with Roman orders, arches or ornaments; but no one who regards architecture as something more than its exterior details can regard these as copies. The details are not used as the Romans used them; the buildings in which they figure are totally unlike any ancient Roman building. But of this more anon.

In the brief list of instances of deliberate imitation set forth by the hostile critics, four are especially conspicuous. Of these three are by Alberti (1404-1473), and one by Bramante (1444-1514). Let us examine these carefully.

In the Rucellai palace at Florence (Fig. 3), Alberti employed three tiers of flat pilasters with their entablatures to divide the bays and stories of the façade, and in so doing is said to have tried to copy Roman models or some Roman model; what model or models no critic has ventured to specify. Even Mr. W. J. Anderson declares, in speaking of this palace, that "Alberti was the first who seriously attempted the *re-creation of Roman architecture* as distinguished from Roman principles."† But one searches the Roman monuments in vain for any building that bears the slightest resemblance to the Rucellai. Not a pilaster, capital, string-course, window or arch is copied from or closely resembles any Roman prototype. The Romans never built pilastered façades, but reserved the pilaster for a limited number of special uses. Moreover Alberti's pilasters are wholly unlike the Roman type, being so flat as to be hardly more than engraved on the rusticated front. The suggestion of pilasters may have been derived from the upper story of the Colosseum at Rome, which has pilasters, but neither the Rucellai pilasters themselves nor the way they are used resembles the Colosseum. On the other hand, the treatment of the upper cornice of the palace was certainly suggested by that of the Colosseum; but this single detail is the only one in which the Rucellai resembles, imitates or copies

*There are a number of gateways of late date obviously patterned after the general type of the Roman arches of triumph. But not one even of these is a textual copy; they all imitate the general type but treat the details independently. They seem to have been overlooked by the critics, and they are, of course, of only secondary importance.

†Op. cit., p. 35. The italics are ours.

any assignable Roman model. It does, however, in general composition suggest the ruined Palazzo delle Torre at Turin, with which Alberti may or may not have been acquainted; this is a brick building of uncertain date, and could in any case have suggested nothing more than a type of façade treatment. The Rucellai is in no sense a copy of even this example.

It is perfectly true that Alberti drew much of his inspiration from his enthusiastic studies of ancient ruins: the ideas, perhaps, of flat rustication and of marking the stories and dividing the bays, and an appreciation of the classic qualities of scale, proportion, and refinement of detail. But even these ideas were by no means wholly new. Pilasters and wall-strips to divide the bays, and small entablatures as belt-courses, abound in Tuscan Gothic architecture. Alberti, moreover, with all his scholar's knowledge of the Roman orders, in the Rucellai designed his own pilasters, caps and moldings in utter disregard of the Roman canons. He inaugurated a new sort of architectural effect, which for better or worse found many imitators; but in the Rucellai he certainly did not copy.

In the Capella Malatestiana (San Francesco) at Rimini, however, he is said to have copied a Roman triumphal arch; and J. A. Symonds is sure that his model was the Arch of Augustus at Rimini.* It would certainly have been quite natural for so enthusiastic a student of antique remains to draw from so fine and so accessible an example valuable suggestions for the front of this chapel. Symonds is careful to say that he "followed," not that he copied this arch. Professor Moore, on the other hand, calls it "substantially a reproduction of the Arch of Septimius Severus." When a man is alleged to have followed or copied two such widely different models, is it not evident that he copied neither, but simply drew from the general type of which these were differing examples a suggestion for the composition of his chapel front? The design was never completed, but the two-storied central bay with its superposed orders completely destroys the analogy with either of the two arches named as its prototype. As for the engaged columns and round arch, they were already familiar features, and their use can be traced far back into the Middle Ages in both France and Italy. If this be "copying" it is a kind of copying found in all styles and ages, and is compatible with the highest originality.

The third conspicuous example of the alleged Renaissance copying of Roman models is Alberti's façade for his great and noble church of San Andrea at Mantua. Professor Moore, in Figures 19 and 20 of his "Character of Renaissance Architecture," has placed side by side drawings of this façade and of the arch of Septimius Severus, as evidence that "Alberti derived all of these façades, and especially that of San Andrea, from the Roman arch scheme, . . . and the arch of Septimius Severus may, I think, be taken as the model that he had chiefly in mind." It will be noticed that in this case the derivation is not called a reproduction, and Professor Moore's statement as he has worded it may be accepted as substantially correct. So accepted and illuminated by the two illustrations, it simply asserts and shows that Alberti had a certain type of antique arch "in mind" when he designed two or more façades which differ widely from each other as well as from each and every Roman arch from which they are said to be derived. The resemblance between the San Andrea façade and the arch illustrated, alike in composition, scale, detail and total effect, is too remote for even a suggestion of plagiarism. And it cannot be too often repeated that pilasters, pedestals, entablatures, pediments and round arches with archivolts were already "of the previous state of the art" (as the patent-lawyers say), familiar in all sorts of monuments both ancient and medieval. The only features directly assignable to the Roman arch-models are the coffering of the soffit of the great arch, and the transverse arches that open into the central archway from the side bays. It is, moreover, worthy

*"The Renaissance in Italy: the Fine Arts;" p. 74. American Ed., 1883.



FIG. 5. ARCH OF AUGUSTUS, RIMINI.



FIG. 6. ARCH OF SEPTIMIUS SEVERUS, ROME.

of notice that Fergusson, the protagonist of the charge of Renaissance copyism, says nothing of this façade as an imitation of a Roman prototype, but bestows upon it almost unstinted praise. Professor Frothingham, in the fourth volume of the Sturgis-Frothingham "History of Architecture," suggests that it was derived from a little-known Roman arch in Verona, that of the Gabii, which has a gable. One guess is as good as another, and I prefer my own, as above set forth.

All these strictures as to lack of originality, it will be observed, relate wholly to the façades of these buildings; the plan and structural scheme of San Andrea are generally praised even by the hostile critics. These are as plainly inspired by the antique Roman spirit as the façades, but as plainly they are not derived nor copied from any particular example, but are the product of a free and original invention working upon material familiar both by tradition and study.

Finally we come to Bramante's little "Tempietto" in the court of San Pietro in Montorio (Fig. 8), which is said to be "but a modified copy of an ancient model and in no true sense an original design. The changes wrought by the copyist are not of a creative kind consistent with true principles of building. . . . Such merit as it has is primarily due to the ancient model, which he would have done better to have reproduced more exactly." The prosecuting attorney complains that the criminal did not carry his evildoing quite far enough; he would have done better had he made it easier to prove the crime! The model in this case is said to have been the temple of Vesta at Tivoli. But surely to any one who has had practical experience in architectural design this is no copy at all, but an original design. It has in common with the so-called Vesta



FIG. 7. BASILICA SAN ANDREA, MANTUA.

temple absolutely nothing but the general idea of a circular peripteros. The temple of Vesta has eighteen fluted Corinthian columns, the Tempietto sixteen smooth Doric columns.. No one knows how the temple was roofed; the Tempietto has a Renaissance dome on a drum—a type wholly unknown to antiquity. The colonnade is crowned by a balustrade—another feature unknown to antiquity. The cella is adorned with pilasters and niches; the supposed model has none. The model stands on a Roman podium, the "copy" has none. The proportions of the copy are absolutely unlike those of the Roman temple, and its *ensemble* produces a totally different impression. As for its circular form, it was the most natural and even obvious form of a commemorative shrine on a sacred spot—that where St. Peter was supposed to have been crucified. The idea of surrounding it with a colonnade was, of course, derived from classic precedent, but of copying or reproducing any Roman prototype there is no sign.

In addition to these four examples most frequently cited by the critics, Professor Moore sets forth Sansovino's beautiful Logetta at the base of the Campanile of St. Mark and his superb Libreria, both at Venice, as instances of this habit of copying. Of the latter he says:* "In the general scheme of this façade Sansovino has followed that of the ancient theatre of Marcellus, with a free introduction of additional enrichments."

What answer can one make to so extraordinary a statement? Place side by side photographs of these two monuments and pronounce your own verdict on the resemblance. Surely the man who

*Op. cit., p. 122.

could convert the scheme of the theatre of Marcellus into the unsurpassed splendor of the Libreria merely by "a free introduction of additional enrichments" must have been an architectural genius of the highest originality! Further on our critic finds fault with the Loggetta as an extension and spoiling of the Arch of Titus, and judges that "to attach any sort of a Roman triumphal arch to the base of a medieval tower is an architectural absurdity." This pronouncement is made without regard to the way in which the alleged "Roman arch" scheme is used or the purpose to which it is put, or the beauty of the result. All the generations of artists and people of culture who have admired the Loggetta as a gem of decorative architecture must hang their heads in shame at having failed to recognize it as an absurdity!

Fergusson draws a comparison between the incomplete court-arcade of the Lesser Palace of Venice at Rome and the Colosseum. It was very likely the Colosseum that suggested the two superposed arcades of this unfinished work, but it may as well have been any one of a score of other buildings. This arcade is of the antique Roman type, it was an effort to produce something after the fashion of the Roman arcades, but I do not think it can with any reasonableness be called a "copy" of the Colosseum scheme.

The alleged boast of Michel Angelo (some say of Bramante) that he would "set the Pantheon on the Temple of Peace" is probably apocryphal; if he uttered it, it was plainly a mere "fashion of speaking," for his dome is not like the Pantheon nor the church beneath like the Temple of Peace (the Basilica of Maxentius-Constantine). The accusation of copying, in so far as it is supported by no more convincing evidence than the above examples, may well be pronounced an empty charge. One can hardly refrain from quoting *"Parturiunt montes, nascitur ridiculus mus."*

IV.

The charge of systematic and deliberate plagiarism in the works of the Renaissance having been answered, we still have to deal with the charge of lack of originality in the details of that architecture. We are told that the entire architectural baggage of the Renaissance is made up of forms taken from the ruins of antiquity. The Renaissance designer, even when he tries to say an original thing, is using a dead language, even as Alberti used a dead language in his treatise "De Re Aedificatoria." His architecture is an architecture of the Roman orders, and Roman art was dead.

But Alberti wrote in Latin precisely because Latin was *not* a dead language in his day; it was still the language of learning and of what science there was, throughout Europe, and had gained new life from the revival of classic studies. And I have shown on a previous page how vital and persistent was the Roman architectural tradition through the entire Italian Middle Ages. Indeed, Fergusson, who first used the expression of "designing in a dead language," was compelled to admit that the Italian architects, at least in the fifteenth century, were following a perfectly natural, logical, and indeed inevitable course. "The classical style was their own, invented in their country, suited to their climate and, to a certain extent, to their wants." "It was an inevitable consequence that Classical Architecture should supersede Mediaeval in that country at some time or other"—so he wrote in his "Modern Architecture" (p. 43); and on a previous page he declared that "such buildings as San Miniato at Florence, and some of the basiliacs at Rome, are in fact more Classical in plan, and—as their ornaments are generally borrowed from ancient buildings—far more so in detail, than many of the buildings of the Renaissance period." But now follows a curious conclusion by the author of these observations: the Renaissance architects were copyists and the medieval architects were not. The closer imitation of the antique in the medieval buildings was not copying, because "their builders were only thinking of how they might produce the best possible church for their purpose with the materials at their disposal and



FIG. 8. TEMPIETTO IN COURT OF
SAN PIETRO IN MONTORIO, ROME.

not caring to glorify themselves by showing their own individual cleverness." That is to say, the introduction of original and individual features is copying! By what means this critic penetrates to the inner motives of the two sets of designers in order to establish this difference, and why the medieval attempt at textual reproduction of the classic forms was not copying, while their modification and use in novel and original ways by the Renaissance was copying, can only be classed among the many riddles of the Fergussonian logic.

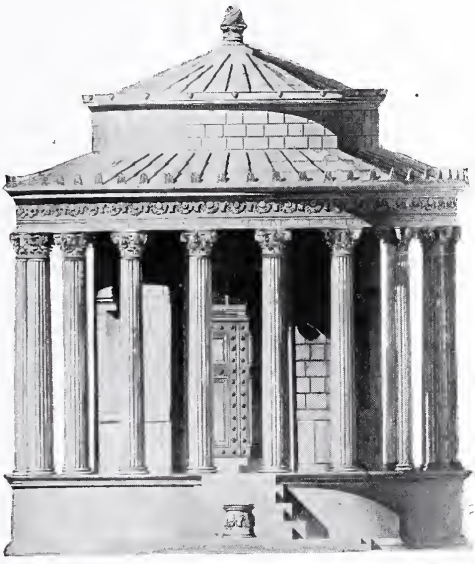


FIG. 9. TEMPLE OF VESTA AT TIVOLI.

How, then, about the classic orders? They are the favorite Campus Martius for militant practice by superficial critics, and thousands are the shafts leveled and discharged at Vignola and Palladio. The Romans used the orders; the Renaissance architects used the orders; they made a special study of Roman architecture; *ergo,* they copied the Roman orders; *ergo* again, they were copyists. *Quod erat demonstrandum!*

It is perfectly true that the Italians of the sixteenth century studied the Roman orders with a somewhat careful scrutiny, and imitated them with more or less accuracy. It is, however, also true that this close study and this careful conformity did not begin until about 1500, and that through the entire Quattrocento it is difficult or impossible to find a "correct"—that is to say a closely copied—column, pilaster or entablature. For at least eighty years the Renaissance architects were content with a merely colorable approximation to the Roman types, which they treated with absolute freedom of adaptation. Turn over the thousands of pages of Geymüller's "Die Renaissance in Toscana," for example, with its fine photographs and accurate drawings of fifteenth and early sixteenth-century buildings, and you will seek in vain for a truly Roman or "correct" column or entablature. If the men of this time sought to revive the glories of classic architecture, it was not by copying either its buildings or its details, but by trying to design in the same spirit of largeness, elegance and stateliness as the ancients, while planning and composing strictly for their own time in their own way. With the sixteenth century there began a stricter classicizing tendency, a greater regard for classic precedent, a closer study of classic detail, with Vitruvius as the model for the formulation of the results of their observations. Architecture became more and more a profession of the learned, an art with principles formulated in books. Yet, strange as it may seem, never was it characterized by a greater brilliancy of invention, never by a surer grasp of the fundamental principles of composition, of proportion, of planning and of decoration, than during the first half-century of this period. It never became the slave of books, and while the details of classic architecture were more accurately transcribed than before, and there was a broader application of the suggestions of composition derived from the antique than in the Quattrocento, the architecture that was produced was still as far removed as possible from a copy of the antique.

The books of "Orders" by Vignola, Palladio, Serlio and Scamozzi were not the hard-and-fast grammars they are so often considered to be. This view of

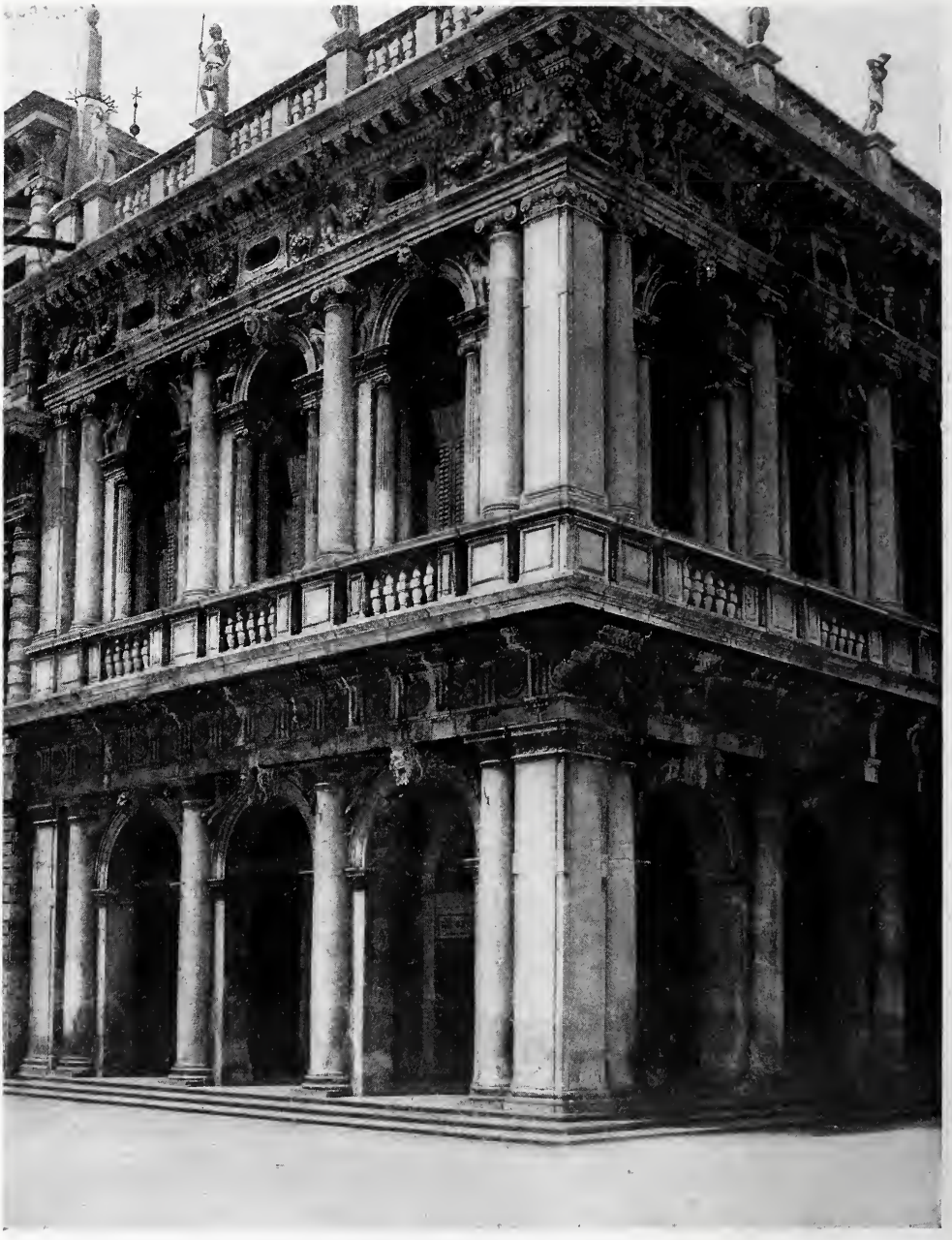


FIG. 10. ST. MARK'S LIBRARY, VENICE.

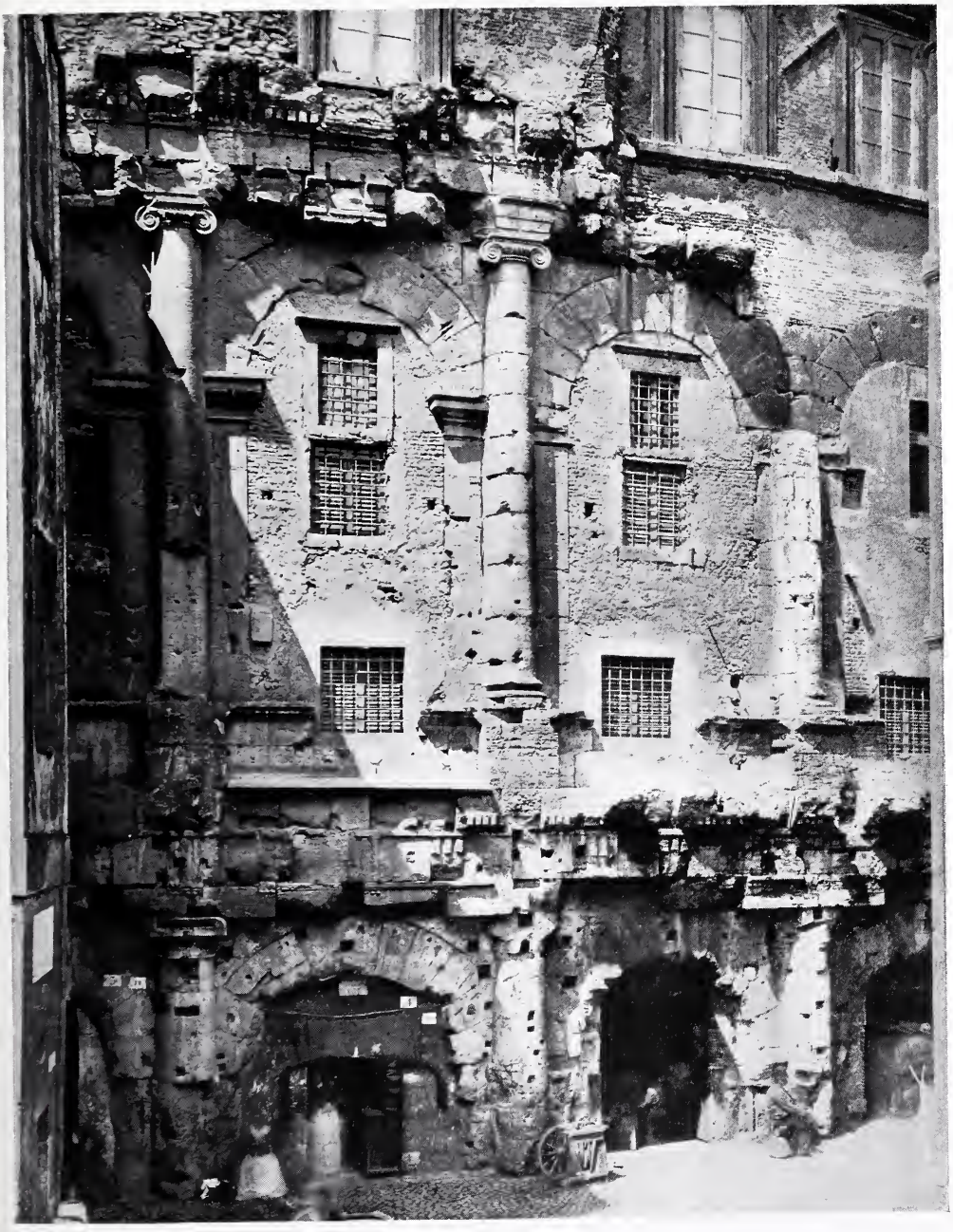


FIG. 11. THEATRE OF MARCELLUS, ROME.

their character, purpose and function is widespread, and has been the source of a vast amount of hostile criticism. But it is the result of careless or superficial observation, and disappears on careful investigation. Each of these books of the orders represents nothing but the author's own idealized generalization from the Roman examples. Save for approximate uniformity in the general proportions of each Order, no two are alike in the details of any Order. It is doubtful if any one of the Orders thus set forth in any of these books corresponds exactly with any antique example. Moreover, Vignola, at least, never conformed to his own Orders as shown in his book! None of these books seems to have hampered the freedom of the sixteenth-century designers, any more than the Canon of Polycletus reduced Greek sculpture to mechanical copying. The architects continued to proportion and detail their columns and entablatures as they pleased, to combine them, couple them, engage them, convert them into pilasters, always according to their own fancy or the need of their particular problem. A large proportion of these Renaissance treatments —for instance Bramante's rhythmical alternation of pilaster-spacing, and the occasional use of coupled columns—were quite without classic precedent.

When one carefully compares the Renaissance use of forms and details of classic origin with the antique, the number, extent and variety of the Renaissance innovations becomes fairly surprising, and the evidence of careful thought and original invention is convincing to any one not predetermined to see in these innovations only distortions and misadjustments. But when the comparison is extended to the larger features and thence to the fundamental conceptions of this architecture, the evidence of creative originality becomes so overwhelming that one wonders how it could ever have been ignored. The Renaissance courtyards have no antique prototypes; the Renaissance domical cruciform church was a completely new creation, the extraordinary variety of whose forms is in itself proof of a highly active creative genius; the Renaissance dome set on a drum and crowned by a lantern was an original development of the fifteenth and sixteenth centuries, based in no respect on Roman models. The Florentine or North Italian type of arcade with arches borne directly upon columns can be traced continuously back to Early Christian basilicas of the fourth century and no further. There is no evidence whatever that its isolated occurrence in Diocletian's palace at Spalato had any influence on the Renaissance designers. None of Brunelleschi's buildings nor of Michelozzi's, were patterned after any recognizable antique model. The Renaissance types of tower were evolved by the Italian architects with no help from classic prototypes. The familiar forms of the balustrade, both in their details and in their use as architural features, were new creations of the Renaissance, absolutely without model or precedent in classic design. Yet we are told that the Renaissance lacked creative origination!

PORTFOLIO OF CVRRENT ARCHITECTVRE



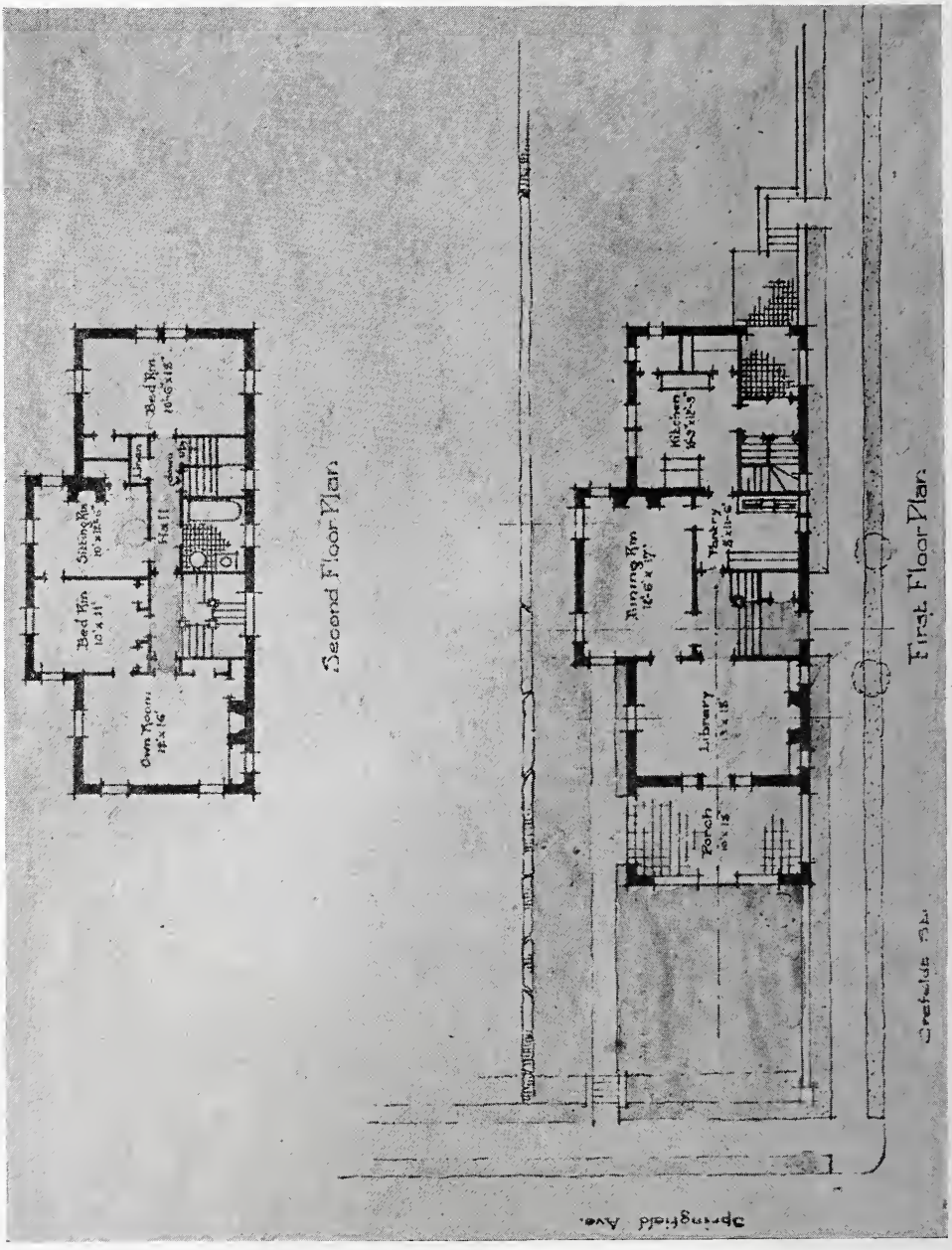
GARDEN GATE—HOUSE OF E. DIGBY BALTZELL, ESQ., ST. MARTIN'S, CHESTNUT HILL, PHILADELPHIA. EDMUND B. GILCHRIST, ARCHITECT.



ENTRANCE DETAIL—HOUSE OF E. DIGBY BALTZELL, ESQ., ST. MARTIN'S, CHESTNUT HILL, PHILADELPHIA. EDMUND B. GILCHRIST, ARCHITECT.



EAST FRONT—HOUSE OF E. DIGBY BALTZELL, ESQ., ST. MARTIN'S, CHESTNUT HILL, PHILADELPHIA. EDMUND B. GILCHRIST, ARCHITECT.



FLOOR PLANS—HOUSE OF E. DIGBY BALTZELL, ESQ., ST. MARTIN'S, CHESTNUT HILL, PHILADELPHIA. EDMUND B. GILCHRIST, ARCHITECT.



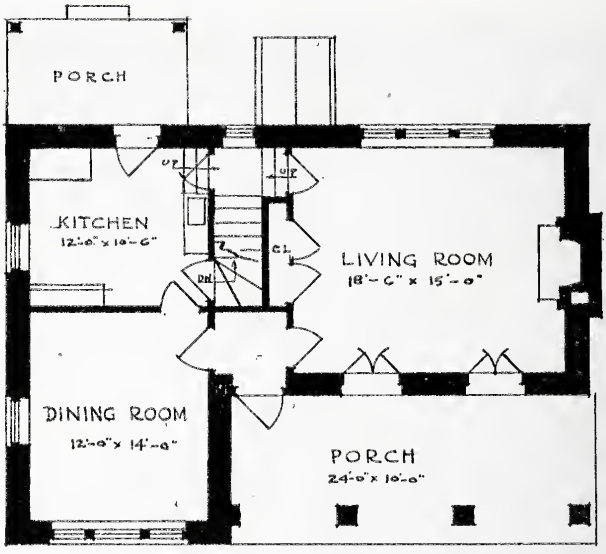
SOUTHWEST VIEW—HOUSE OF E. DIGBY BALTZELL, ESQ., ST. MARTIN'S, CHESTNUT HILL, PHILADELPHIA. EDMUND B. GILCHRIST, ARCHITECT.



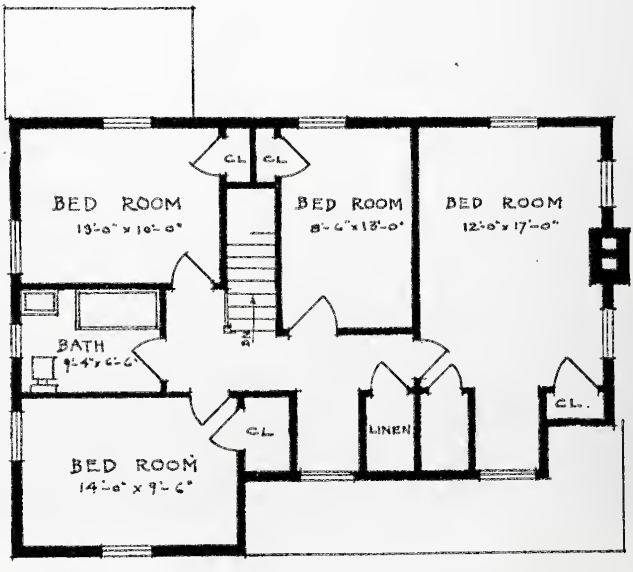
DRAWING ROOM—HOUSE OF E. DIGBY BALTZELL, ESQ., ST. MARTIN'S, CHESTNUT HILL, PHILADELPHIA. EDMUND B. GILCHRIST, ARCHITECT.



ENTRY AND DINING ROOM — HOUSE OF E. DIGBY BALTZELL, ESQ., ST. MARTIN'S, CHESTNUT HILL, PHILADELPHIA. EDMUND B. GILCHRIST, ARCHITECT.



FIRST FLOOR PLAN



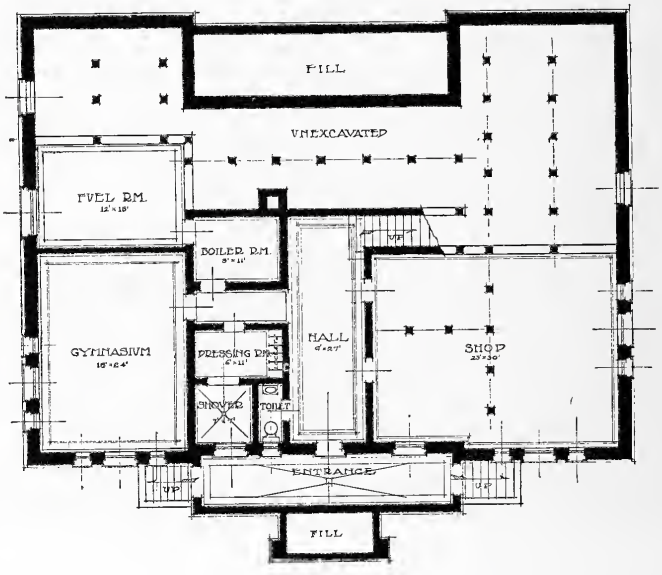
FIRST AND SECOND FLOOR PLANS—HOUSE AT ARONIMINK, PA. EDWARD F. HOFFMAN, JR., ARCHITECT.



NORTHWEST FRONT—HOUSE AT ARONIMINK, PA.
Edward F. Hoffman, Jr., Architect.



NORTHEAST FRONT—HOUSE AT ARONIMINK, PA.
Edward F. Hoffman, Jr., Architect.

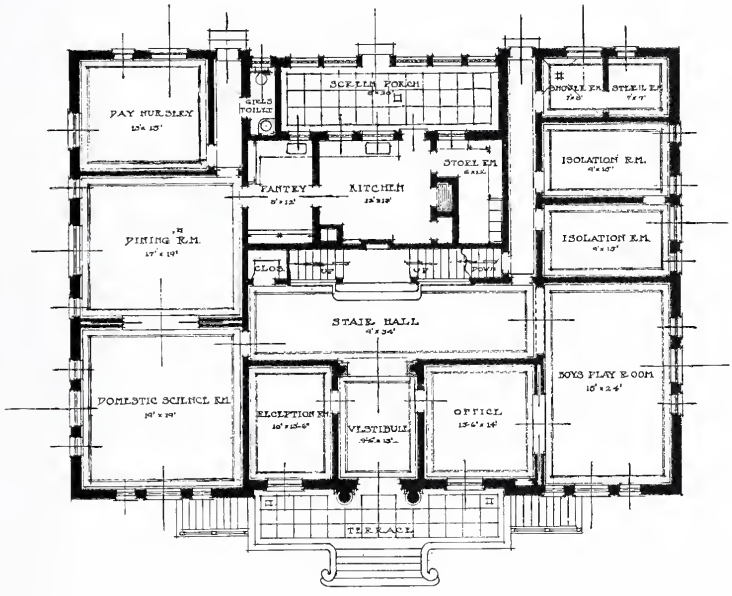


BASEMENT PLAN
SCALE 1/8"=1'.

SANTA BARBARA COUNTY DETENTION HOME

SANTA BARBARA CALIFORNIA

Roland F. Sauter, Architect.



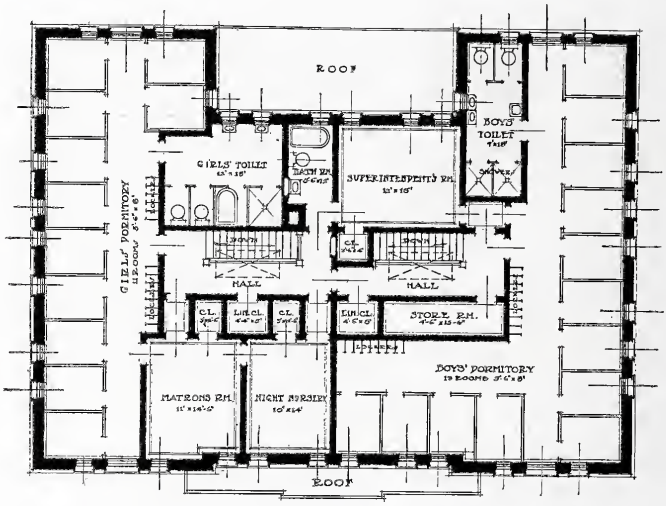
FIRST FLOOR PLAN

SCALE 1/8"=1'

SANTA BARBARA COUNTY DETENTION HOME

SANTA BARBARA CALIFORNIA

Roland F. Sauter, Architect.



SECOND FLOOR PLAN

SCALE ⅛-1.

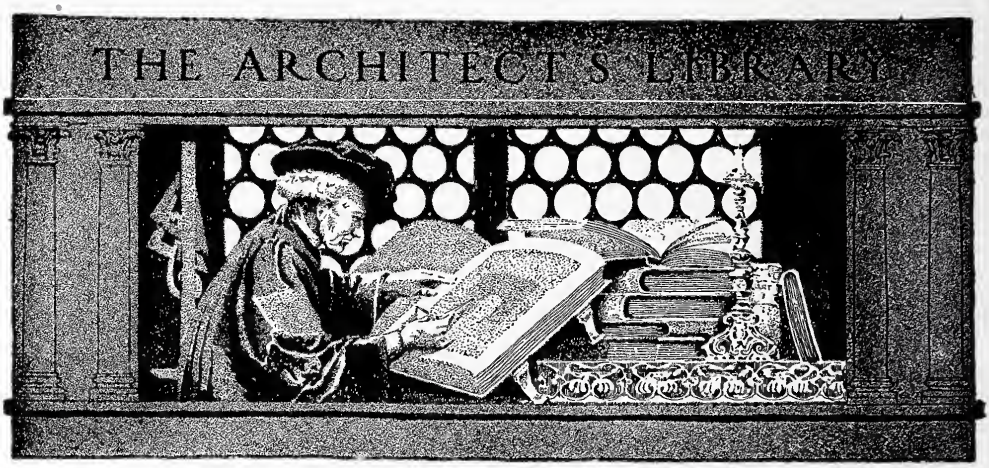
SANTA BARBARA COUNTY DETENTION HOME

SANTA BARBARA CALIFORNIA

Roland F. Sauter, Architect.



SANTA BARBARA COUNTY DETENTION HOME, SANTA BARBARA, CALIFORNIA. ROLAND F. SAUTER, ARCHITECT.



WAR BOOKS OF THE CATHEDRALS

By BARR FERREE

Part VI

MUCH has happened in France and in the world since the great battle of Verdun opened on February 21, 1916. Great battles have been fought, colossal campaigns brought to a successful conclusion, and victory won by the Allies for right and for civilization. Much has been written on these later phases of the war, and much has yet to be written, for Verdun continues to occupy a foremost place in French writings. Three notable books on Verdun appeared in 1918, and in many general volumes it is the central event.

L'Assaut contre Verdun, by E. Diaz-Retg, is an admirable survey of events from February 21 to March 31, 1916. It thus covers the opening of the battle and the events of the first six weeks. The author is a Spanish journalist, the French edition being a translation of the Spanish original. M. Diaz-Retg did not visit Verdun until after the battle, but at this later time he thoroughly familiarized himself with the topography of the region and consulted with many of the leading combatants. He makes rather extensive use of German notes and comments, which gives to his book a somewhat broader character than many of the French books on Verdun.

The story is admirably told, and with very great clearness. He divides his book into four parts. The first treats of the preliminaries of the attack, in which, among other things, he discusses the reasons for attacking Verdun and describes at some length the final German preparations. The second section deals with the first phase of the battle and its colossal beginnings. The third section treats of the second phase, and deals with the conflicts in the Vaux-Douaumont sector, Fresnes, Forges, the Cote de l'Oie, the Bois des Corbeaux, the massacre of the Germans and the aerial bombardments. The fourth section covers the third phase, and is concerned with attacks on the Mort Homme and against Vaux, Avocourt, Malancourt and Haucourt. The German losses and the critical situation of Germany are studied in the final chapter. It is interesting to note that as early as the end of March M. Diaz-Retg did not hesitate to state that the Germans would not take Verdun.

La Victoire de Verdun, by Henri Dugard, is a more comprehensive study, since it covers the period from February 21, 1916, to November 3, 1917, thus covering practically the whole great con-

flict. The earlier parts are based on the author's previous book, *La Bataille de Verdun,* which ended with May 1, 1916. Although the present book is, therefore, very nearly complete as a history of the battle of Verdun, it is less readable than M. Diaz-Retg's absorbing study. This is obviously due to the greater number of episodes treated; the chapters are short and rather fragmentary; but the whole story is here, and to tell that was the author's purpose.

A little less than half the book is given up to an appendix in which more detailed accounts are given of many notable episodes than is included in the main text. Some of these are narratives of eye-witnesses and participants, collected, in some part, from newspapers. They constitute an exceedingly valuable collection of documents, and are more than worth while putting into permanent form. The volume concludes with a bibliography of Verdun, giving, with notes, an extensive list of writings on the battle. This very useful feature no previous writer had thought of including in his book of Verdun.

La Guerre sur le Front Occidental. L'Année de Verdun, by Joseph Reinach, is one of the most important books that has appeared to date. The author is one of the foremost military critics of France. His famous "Commentaires de Polybe" have been an almost daily feature of *Le Figaro* from the very beginning of the war, and have been republished in a long series of books.

The present volume, which carries the sub-title *Etude Stratégique, 1916,* is a masterly survey of the whole war for 1916. It is indeed the year of Verdun, for Verdun was the most important event on the western front in that year, and the larger part of this book is directly concerned with events at that city. But M. Reinach puts the battle of Verdun in its proper relationship to the war, as the leading event of a colossal conflict, by treating of all the military events of the year. Few other writers have taken so comprehensive a view, and few others, it is but the simple truth to say, were so competent to do so.

His first chapter describes conditions on the western front prior to the opening of the battle, and when one reads M. Reinach's book one realizes how very essential it is to be informed on the situation as a whole. The second chapter deals with the opening of the battle, which, presently transformed itself into a siege, which forms the theme of the third chapter. The battle of the Somme is studied in the fourth chapter, and its underlying idea as a relief to the struggle at Verdun is brought out in a very definite way. The last chapter treats of the final events at Verdun in 1916.

This is a very bald outline of the contents of the book. It abounds in detail, and is particularly remarkable in the way in which distantly-related events are correlated with the great feature of the year, the battle of Verdun. M. Reinach, it is interesting to note, pays frequent and very high tribute to Marshal Joffre as the dominating military mind of 1916.

Au Ciel de Verdun, by Bernard Lafont, being the notes of an aviator, might be expected to offer a quite new topic among the many military books on Verdun. Much of it, however, consists of the author's reflections while in flight, and it is not, therefore, so interesting to the general reader as he may have innocently supposed. An aviator in flight is a person of the most pronounced heroism, but he can hardly present himself in the way people on earth view him; and what he is thinking about is of little interest compared with what he does. M. Lafont is quite modest enough as regards himself, but his book contributes little information to the great theme of Verdun.

Quite as modest as a writer is Philip Sidney Rice, whose *An American Crusader at Verdun* is a brief and human account of the experiences of an ambulance driver from Princeton, whose chief service was at Verdun. His work here was so dangerous and was carried out with so much courage that it was cited by the commanding general of the 69th Division of Infantry of the French Army. Mr. Rice went abroad to help in the great war, and his brief account of what he saw—rather than what he

did—has been compiled for his family and friends.

Mon Régiment dans la Fournaise de Verdun et dans la Bataille de la Somme, by Paul Dubrulle, stands distinctly apart among the host of personal reminiscences of the great war scenes. The author was a soldier priest; he was sergeant-quartermaster during the earlier part of the campaign, and was made under-lieutenant in the course of the battle of the Somme; he was killed in action in April, 1917. He was a student and a worker, and was ordained priest on August 2, 1914, the day of mobilization. He took part in the great battles of Verdun and of the Somme, and the story of his experiences is so fine, so well told and so distinctly personal that a biographical and appreciative introduction by Capt. Henry Bordeaux is prefixed to it. It is a book of unusual merit and of deep interest.

The *Histoire d'une Compagnie,* by Capt. Delvert, is the history of the 8th company of the 101st regiment of infantry. The story falls into two parts, in Champagne, at the Main de Massiges, from November 11, 1915, to April 21, 1916; and at Verdun, from April 21 to June 26, 1916. The more extensive service in the Champagne sector seems rather quiet compared to the violent events into which the regiment was thrown on its arrival at Verdun. Sent almost at once to the trenches at Fort Vaux, they were plunged into the battle almost at the heighth of the fighting. They were ultimately assigned to the work known as "R.1" Here they withstood five assaults in four days; they held their ground, but at the end of that time —June 5, 1916—the regiment no longer existed. It had died on the field of honor. The few survivors were relieved and ultimately assigned to other organizations. Capt. Delvert presents his story in diary form, possibly the best way in which his swiftly-moving narrative could have been told. He has a fine taste for architecture, as evidenced by his brief comments on buildings of note, seen in his campaigns or during his brief holidays.

The Aisne, in its early days, Champagne and Verdun, cover the campaigns described by Louis Hourticq, in his *Récits et Réflexions d'un Combattant,* (1915-1917). He served twice at Verdun, and took part in battles before Reims. His book may be read with interest and profit.

This can hardly be said of *A l'Ecole de la Guerre,* by Commandant J. E. Henches. The author was an artillery officer, who served with so much distinction as to be cited four times. His book reproduces letters, chiefly to his wife. The Champagne, Verdun and Reims were the scenes of his service, but the book gives little information as to any locality and consists largely of reflections on war conditions, often of the most dolorous character. As a tribute to a brave man his book is entitled to consideration, but it supplies no information whatever.

To have served three years in the war, and survived to publish an account of it is no mean achievement. This was accomplished by J. L. Gaston Pastre, of the Artillery, in his book *Trios Ans de Front.* His service began in Belgium, and from there he was successively transferred to the Aisne and Champagne, Verdun, Argonne and Lorraine. He saw much, took an active part in all these campaigns, and has written a sprightly account of his adventures.

From Africa to the Champagne is a long cry. Very moving is the story of Vital Magne, whose *Heures de Guerre* cover this widely distributed service. The book was written during a prolonged convalescence from a serious wound. It makes no pretense to be a continuous narrative, but throws striking light on many notable incidents.

M. René Mercier, whose *Nancy Sauvée* has been previously noted in these notes, continues the story of his native city in a second book, *Nancy Bombardée.* Greater interest will be taken in the reduced facsimiles of proclamations posted in Nancy during the bombardment, with which the book is embellished, than in the author's somewhat long drawn-out story.

It is well to caution the reader that *Pendant qu'ils étaient à Noyon,* by Maurice Donnay, of the French Academy,

contains nothing whatever as to Noyon, as might be supposed from the title. The book is a collection of newspaper articles on all sorts of miscellaneous subjects, written and first published during the German occupation of Noyon. A more misleading title could not have been devised.

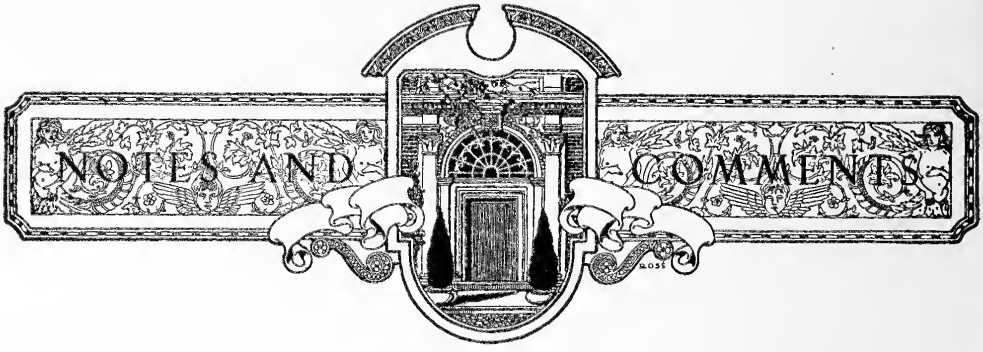
Almost as miscellaneous in its contents, although dealing throughout with the war, is Pierre Loti's *L'Horreur Allemande.* A substantial portion of the book is given to impressions of Italy in the war. It includes a brilliant picture of Reims, entitled *"Ca, c'est Reims qui brule!"* originally published in L'Illustration.

Special interest will be taken in *Souvenirs de Guerre d'un Sous-officier allemand,* as one of the few books by a German combatant that has yet appeared outside Germany. The author saw service in 1914, 1915, and 1916, and his name is not given. He was grievously wounded at Verdun, and was sent to Schleswig, finally retiring from the army and seeking refuge in Denmark. His chapters on Reims and in Champagne have a unique interest in being from the side of the attacking enemy. It is the first document of this kind we have had.

One further book in English, although of French origin, remains to be noted. This is *A Blue Devil of France,* by Capt. G. P. Capart. It is to be regretted that the publishers should have sent it out with the flamboyant cover-paper that encases it. They tell us, in short, that "it gives a more striking picture of the war, and all it has meant than has yet been presented." It is very far from doing anything of the kind. It is not a continuous story of the war or of any part of it, but a collection of anecdotes. It is a lively book, easy to read, and contains not a few episodes of interest; but it is very far from being a serious contribution to the literature of the war.

Old Glory and Verdun, by Elizabeth Frazer, has a striking title that displays the tendency of some English and American writers to give a fictitious value to their books by bringing the sacred word Verdun into their titles. The chapter on Verdun, that gives the book its title, describes a hasty visit after the battle. The outstanding feature in this account, is the fact that the author visited Verdun. A very fortunate person.

The readers of contemporary magazines need not be informed as to the remarkable manner in which fiction has seized upon episodes in the war for furthering the sale of manuscripts. There has been so little of real interest in this flood of war-fiction, that the magazine reader has been pushed for relaxation in the very place where relaxation should have been sought. But the remarkable stories by Capt. F. Britten Austin, which have been gathered in book form under the happy title *According to Orders,* stand quite apart, and are distinctly worth while. Although the author is an English officer, he writes from the German point of view; that is to say, his stories are, apparently, told by Germans. This difficult feat in authorship he has carried out with enormous success. In many respects the most notable story in this collection is *"Nach* Verdun!" describing the first attack on Verdun as supposedly told by a German from the German side. It is a remarkable piece of work, involving no improbabilities.



War Memorials.

Interest runs high at the present moment in regard to the question of the war memorials which are certain to appear in large numbers in all parts of the country. The many constructive suggestions which appear each week in the periodicals are prompted largely by an undercurrent of fear lest the monumental horrors of post-Civil War days be repeated in the present eagerness promptly to commemorate the sacrifices of the recent war. A great danger lies in a too hasty execution of immature ideas, a danger which the French are reported to have lessened in their typically clear-sighted way by the passage of a law forbidding the erection of public war memorials for a period of ten years after the signing of peace.

As in all questions of such general interest controversy speedily arises, and we find in a general way this discussion resolving itself into an exchange of opinion upon the virtues of two types of memorial —the purely monumental work which shall commemorate idealistically in terms of art the qualities of character and of mind called forth by the great emergency of war and the more utilitarian memorial in which the idea of service is preeminently taking the form of buildings for special uses or of organizations of a social-service or civic nature.

Under these two headings come most of the definite suggestions for memorials and the list of each kind is long and various. It would seem that of the two, the purely monumental type might be of particular propriety in the commemoration of the service and sacrifice of large groups of men who were associated together against the foe in behalf of a common ideal. Such a dignified and impersonal monument whose abstract beauty must form its essential justification, might commemorate the dead of a local regiment, battalion or division, or some particular action in which one of these units has taken part. The organization formed for social service or civic uplift, or the building devoted to similar use finds its particular appropriateness as a memorial to individuals whose energies, directed in life in channels of service to others, might thus be carried on. Some such distinction as this is at the basis of a correct choice of the general form which a memorial should take, and much confusion is avoided in the preliminary discussion by the realization of the appropriateness of one of these types to a particular occasion.

Whatever the general choice may be, the concrete memorial itself will immediately require the attention of trained professional advisers whose authority must be recognized. It is here that we begin to find a helpful attitude on the part of professional men and their related organizations. The activity of the American Federation of Arts has set the pace which is to mark the development of sentiment throughout the country in the interest of fine monumental memorials. Their action in the matter was very prompt, and early in January a circular letter was issued from the offices of the Federation, containing suggestions for the treatment of war memorials. Since that time a second circular has been issued which makes announcement of a General Committee to act in an advisory capacity to individuals or committees projecting war memorials of any kind. This committee is composed of representative men from different parts of the country prominent for their interest or accomplishment in architecture, sculpture or painting, education, law or economics, philanthropy, social service or civic reform. In addition

to this General Committee there are special regional subcommittees and a list of professional advisors for the aid and convenience of those in different parts of the country who wish specific and professional advice.

This circular makes clear the character of memorial which is the most fitting for its purpose: "The most impressive monument is one which appeals to the imagination alone, which rests not upon its material use, but upon its idealism. From such a monument flows the impulse for great and heroic action, for devotion to duty and for love of country. The Arch of Triumph of Paris, the Washington Monument and the Lincoln Memorial are examples of such monuments. They are devoid of practical utility, but they minister to a much higher use; they compel contemplation of the great men and ideals which they commemorate; they elevate the thoughts of all beholders; they arouse and make effective the finest impulses of humanity. They are the visible symbols of the aspirations of the race. The spirit may be the same whether the monument is large or small; a little roadside shrine or cross, a village fountain or a memorial tablet, speaks the same message as the majestic arch or shaft or temple, and both messages will be pure and fine and perhaps equally far-reaching, if the form of that message is appealing and beautiful. Display of wealth, ostentation and overelaborateness are unbecoming and vulgar. Elegant simplicity, strength with refinement, and a grace of handling that imparts charm are the ends to be sought. These ends require, on the part of everybody connected with the enterprise—committee, adviser and artist—familiarity with the standards of art, and above all, good taste. Only by a combination of all these elements can a really satisfactory result be obtained."

There are suggested in this folder a number of ideas such as a village green, stained glass windows, medals, tablets and many monumental works in architecture or sculpture or a combination of both. Inquiries or suggestions with regard to any sort of memorial may be sent to Miss Leila Mechlin, Secretary, American Federation of Arts, 1741 New York avenue, Washington, D. C.

A very interesting pamphlet has been recently issued by the Municipal Art Society of New York City, dealing with this subject in a somewhat different, but by no means less helpful way. This issue of their quarterly bulletin takes up in a constructive manner suggestions for the form and character which a memorial should take and the steps preliminary to the execution of the idea. Numerous illustrations show a variety of memorials already in existence and present the history of America's achievements both in war and in peace as expressed in monumental form. The pamphlet should be in the hands of every committee of laymen in the early stages of their deliberations on the choice of memorials.

In a talk before the New York Chapter of the American Society of Landscape Architects, Mr. Harold A. Caparn has strongly urged that propaganda be carried on with its aim the jealous guarding of the parks and other public places into which memorials are apt to enter. He urges that commemorative sculpture be not permitted in the parks unless its excellence as sculpture has been convincingly attested. The necessity of this protection of the few open spaces in cities is well recognized and its need is now all the greater when the impulse is to give this land, one of the most precious things in the city's possession, to builders of monuments without a proper care for the artistic quality of the monuments themselves.

Among the suggestions for memorials in New York City is the creation of a memorial plaza before the Grand Central Station, where the effect could be dignified and important artistically, as well as of practical benefit in its aid to the solution of the problem of traffic congestion in the neighborhood. Another suggestion, which would call into one's mind again Mr. Caparn's warning, is that of the utilization of the reservoir site in Central Park, New York, for a memorial to Mayor Mitchel. The erection of the temporary arch in Madison Square has demonstrated to most people the mistake which it would be to carry out the scheme in more monumental material than at present.

The approaching campaign for a fund to complete the nave of the Cathedral of St. John the Divine immediately suggests the idea of breathing into this building the character in part of a votive church. Certainly no building could be more metropolitan, if not national, in its position, nor less open to suggestions of utilitarian purposes.

In the west and middle west, the tendency seems to be running in the direction

of monumental city plans. This is possible in a country where land, still imperfectly developed, is not at so great a premium as in the east and such schemes permit not only of a great general scheme of breadth and dignity, but also of the introduction of many individual votive monuments. Mr. Polk discussed in these columns such a scheme of community development suggested for San Francisco, which contained many elements of value. St. Louis proposes a program to cover the reconstruction years after the war, which is dealt with in detail in a pamphlet issued by the City Plan Commission of St. Louis, with an introduction by Winston Churchill.

The Red Cross is a national, an international, institution. The work which it has done is second to none in the estimate of the sacrifice and accomplishment of the war, and some fitting memorial to its labors, other than a utilitarian building, however dignified, would be deserving of the attention of the best of the artists.

The natural creators of memorials, in which the supreme requirement is that of beauty, are the trained members of the artistic professions, architects, painters, sculptors and musicians. Music played so great a part in this war, its integrant morale was of such supreme importance that when we talk of memorials of artistic excellence should we not think also of some musical composition of beauty and dignity? Such a memorial could be more truly national than any more tangible one in that it would constitute a possession at one time of every town and hamlet in the country. This is a sort of commemorative art which cannot be made to order with any hope of great success, but it would not be surprising if its creation were only a matter of time. Some such musical composition, or cycle of compositions, would call for an auditorium or festival hall as a setting for its performance or an amphitheatre of noble inspiration, which would be fitting and dignified as monuments. The announcement of a projected memorial in Strassburg to Rouget de l'Isle, who was himself the creator of a living musical memorial whose inspiration has lasted a hundred years, is interesting in this connection.

One danger to be avoided in war memorials is the glorification of many of the actual deeds of war and the shrouding of war's activities in a haze of romance and sentiment. This has been done too much in the past, the Germans have carried it to dreadful extremes, other European countries almost equally so, and as the present generation has seen war in all its ugly nakedness, it is not its dramatic moments which we should care to immortalize, but the spirit of courage, of heroism and sacrifice which it has inspired.

The next few months will be filled with suggestions and efforts in the direction of reconstruction and war memorials, and it is to be hoped that projects of distinction and foresight may appear on the horizon which may be reported and discussed in these columns.

CHARLES OVER CORNELIUS.

Errors of Omission.

I note in the May, 1919, issue of the Architectural Record that you have published the plans and a view of the Rochester Y. M. C. A., giving me the entire credit as architect. I desire to say that when this building was designed, the firm was Jackson, Rosencrans & Waterbury, and also that Messrs. J. Foster Warner and Claude Bragdon, of Rochester, were associated with us in the construction of the building. I am sorry that the error occurred, and if it is possible for you to do so, I should be pleased to have it corrected.

JOHN F. JACKSON.

In your issue of May, 1919, you illustrate the residence of Leonard M. Thomas, Esq., New York City, F. Burrell Hoffman, Jr., architect. This residence I built for myself some four years ago and sold it to Mr. Thomas about two years ago. Mr. Hoffman made some alterations in the interior. No alteration whatever was made on the exterior and no material alteration on the interior other than the redecoration of the dining room and the entire changing of my studio into a living room. Under these circumstances I must ask you to correct in your next issue the mistake you have made by publishing this house under the name of F. Burrell Hoffman, Jr., architect.

F. J. STERNER.

VGVST THE 1919

ARCHITECTVRAL RECORD



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Business Manager: J. A. OAKLEY

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Yearly Subscription—United States $3.00—*Foreign* $4.00—*Single copies* 35 *cents. Entered May* 22, 1902, *as Second Class Matter, at New York, N. Y. Member Audit Bureau of Circulation.*

PUBLISHED MONTHLY BY
THE ARCHITECTURAL RECORD COMPANY
115-119 WEST FORTIETH STREET, NEW YORK

F. T. MILLER, Pres. W. D. HADSELL, Vice-Pres. J. W. FRANK, Sec'y-Treas. E. S. DODGE, Vice-Pres



Photographs by Kenneth Clark.

STAIRWAY FROM ENTRANCE HALL—RESIDENCE OF OTTO H. KAHN, ESQ., NEW YORK.
J. ARMSTRONG STENHOUSE, ARCHITECT.

THE ARCHITECTVRAL RECORD

VOLVME XLVI NVMBER II

AUGUST, 1919

THE RESIDENCE OF OTTO H. KAHN, ESQ. NEW YORK

J. ARMSTRONG STENHOUSE, ARCHITECT

By

LEON V. SOLON

AS we cultivate the faculty for discrimination in esthetic values, judgment leads us to esteem the sensuous in art and decoration as a quality of secondary merit to that of intellectual beauty; to the latter category purity in stylistic expression belongs. A rare perception of the ideals actuating the architect of the Renaissance stimulates the imagination of Mr. Stenhouse, without fettering it. His work is a virile reaction to sixteenth century stylistic influences, venerated and thoroughly comprehended.

Fluency of expression in any distinct species of esthetic selection can only proceed from ardent study, pursued to the extent of saturation; but mastery demands in addition definite personal qualifications—innate sympathy and intuitive perception of the esthetic aspirations of the chosen period. In the course of specialized study strong predilections must necessarily mature towards certain phases of expression evoking the promptest enthusiasm; a preponderating influence over mental selection must inevitably be exerted by those sympathies during the formulation of original themes, with the result that a new combination of the elements of effect must occur, differing from the typical arrangement existing in the model.

The residence of Mr. Otto H. Kahn on Fifth Avenue, here reproduced, is a remarkable example of well-balanced readjustment in those esthetic elements that are found in architecture of the early sixteenth century in Italy. We

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identify those elements in all their traditional purity in Mr. Stenhouse's work, but the method of their readjustment is so subtle, so intangible, that, though we are conscious everywhere of changes in the mutual relation of elements of effect, we are unable to detect tangible pecularities in the final result. The architect's individuality impresses itself upon us throughout the entire scheme, undepreciated by mannerism or conventional habit of thought. As a wealth of architectural beauties reveal themselves in this excellent work, enjoyment accumulates unchecked, with the abandon that confidence in unerring skill begets. His studentship is of that intense order which so frequently produces the dried fruit of pedantry, where imagination is stilted, but the pedant at his best produces formula—the artist, feeling.

Vasari tells us how fortunate it was for Bramante that the great architect met Pope Julius II, remarking that Bramante was thereby furnished with opportunities to display the versatility of his talent and his mastery over the difficulties of his art. The biographer recognizes by those remarks the extent to which architecture is dependent on external forces for the direction of its course, its expansion and progress. The decision to build an edifice of the pretension of the Kahn house creates an opportunity for the exercise of architectural talent that occurs rarely in any period; the creation of such opportunities is vital to the attainment of a national type of architectural expression, provided always that the quality of patronage is such that the objective set is worthy.

In all past ages the erection of beautiful buildings has lain with the class possessing material weight or moral ascendency in the State; certain broad social tendencies prevailing with that class influenced the approach to all decorative or architectural problems, impressing themselves unmistakably on the material outcome of esthetic impulse. A distinct phase of treatment, reflecting the relation of the building class to the edifice, and the relation of the edifice to the community, can be identified with each evolution of national ideals; these influences have been transmitted by the great architects of each period, but were not originated by them.

Architecture differs from its sister arts of painting or sculpture in the varying intrinsic value of the idea, subject to whether it be graphically stated or actually carried out. The work of the painter and sculptor is not dependent on the attainment of its ultimate environment for full recognition, being self-sufficient in each phase of development. In those arts credit is accorded the work of the artist at any stage of elaboration, regardless of contributory relation, being apportioned according to the capacity with which an emotion proceeding from an observation is materialized; the value of the work being relative to the artist's skill in making a direct and concise statement of his chosen phase of observation. Arts that are basically imitative or emotional in expression need no supplementation to the artist's statement. But when beauty in art lies to a great extent in structural quality, graphic representation is inadequate to transmit excellencies, realizable only in the completed assembly of parts.

No great reputations are accorded in the history of architecture solely on the evidence of draughted projects, and no architects have attained greatness in that isolation and neglect which in many instances reacted advantageously for the development of genius in painting and sculpture; for this reason the profession has always been spared the doubtful compensation of posthumous honor for lifelong neglect. The creation of opportunity, therefore, by those possessing the power is the price of progress, and the exercise of judgment in the formulation of those opportunities is the conditon determining the measure of quality.

If we consider architectural progress as dependent primarily on opportunity for practice, it is necessary to locate the motive force, as these sources of power which operated beneficially in former days have no counterpart in American



SOUTH FAÇADE—RESIDENCE OF OTTO H. KAHN, ESQ., NEW YORK.
J. Armstrong Stenhouse, Architect.

civilization; unified religious belief, intellectual revolution, or a government charging itself with the stimulation of national esthetic aspiration, are not today in evidence.

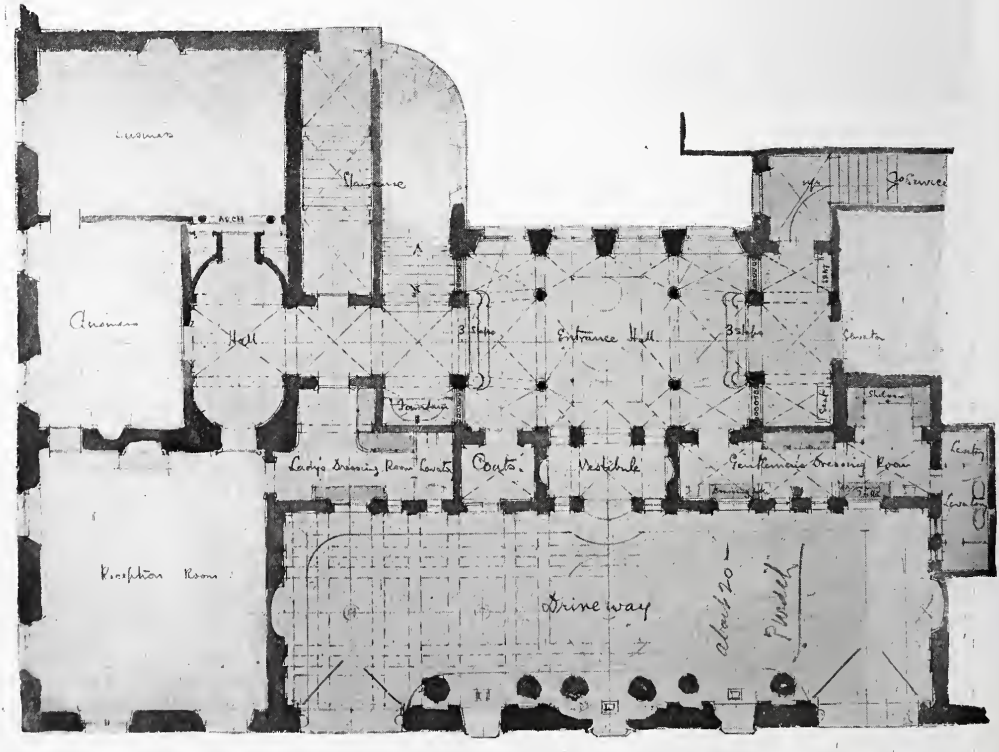
Future historians of American intellectual development will in all probability consider that the inception of a national style of architectural treatment dates from the period when the belief in the power of beauty had resulted in the evolution of a new objective for ambition and a vast field for service to the community. Foremost in the ranks of those who share this belief are the great collectors, who have expended fabulous treasure to acquire the best of all that expresses beauty through art. Their collections exert an effect on the quality of architectural effort in America.

In the Kahn residence, a rare and beautiful collection serves a direct architectural purpose in setting a standard which exacts that grace in proportion and harmony in mass be common factors, linking the structure to the masterpieces housed. When objects of the greatest rarity and beauty become the appurtenances of a home, they must control the quality of their setting, or lose part of their capacity for giving pleasure. This difficult attuning has been successfully achieved by Mr. Stenhouse, through his comprehension of the responsibility imposed upon an architect by the decorative value of accessories; but the rarest tapestries or furniture, the most accomplished architect, and the most lavish patron are powerless, without the exercise of judgment on the latter's part when determining his requirements. An extreme contrast in ideals exists between the Kahn house and those that dictated the treatment of a corresponding undertaking by a well-known collector of the preceding

generation. The opportunity was of equal extent, but the forces employed were material instead of abstract, prodigality in workmanship and costliness of substance being regarded as an option on the possession of taste. With the Stenhouse treatment luxury acquires a bouquet of simplicity, and a standard is set, in advance of any other in this country, to serve as a beacon in a course beset with shoals.

Mr. Stenhouse has derived his inspiration and guidance in this work entirely from the Italian of the sixteenth century. With him Italy is not a romantic recollection of student days, revived in hasty tours, or a subject for library reference when precise data are called for; it has been a land of adoption for many years, with places of pilgrimage scattered broadcast, visited with intense enthusiasm and comprehension. A retentive memory, supplemented with unusual artistic skill, facilitated the accumulation of a vast fund of information and knowledge, always accessible through a methodical habit of thought. He holds an artistic creation an inviolable object, to the extent that he would be incapable of resorting to the practice so prevalent with the partly informed, who use a master's motif as a crutch for rounding a difficult corner, taking full advantage of its perfect adaptability to current uses and of its immunity from copyright restriction.

As a problem is set, familiarity with sixteenth century methods enables him to review solutions to kindred problems, thereby placing himself in the avenue of approach along which the pioneers of the style would have proceeded to a similar objective. The results carry such conviction that the illusion might easily be fostered that the structure had been erected from plans and elevations of the period found in the archives of an ancient noble house, were it not that the



GROUND FLOOR PLAN—RESIDENCE OF OTTO H. KAHN, ESQ., NEW YORK.
J. Armstrong Stenhouse, Architect.



WEST FAÇADE—RESIDENCE OF OTTO H. KAHN, ESQ.,
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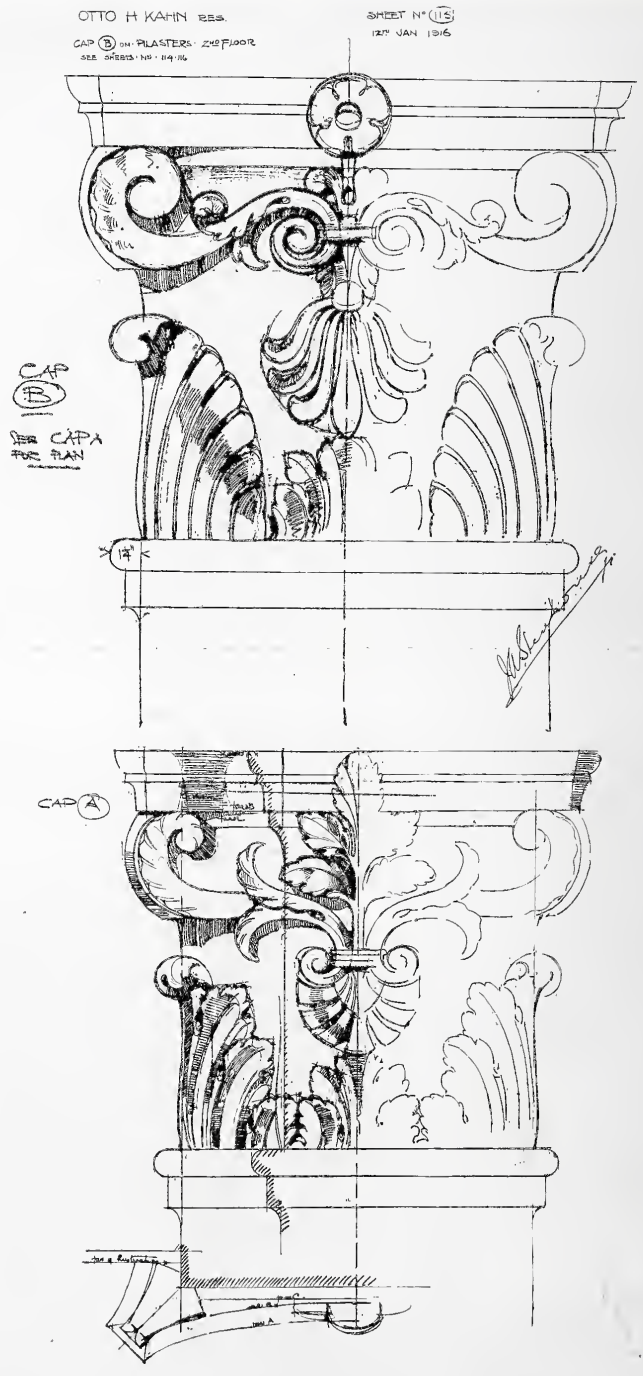
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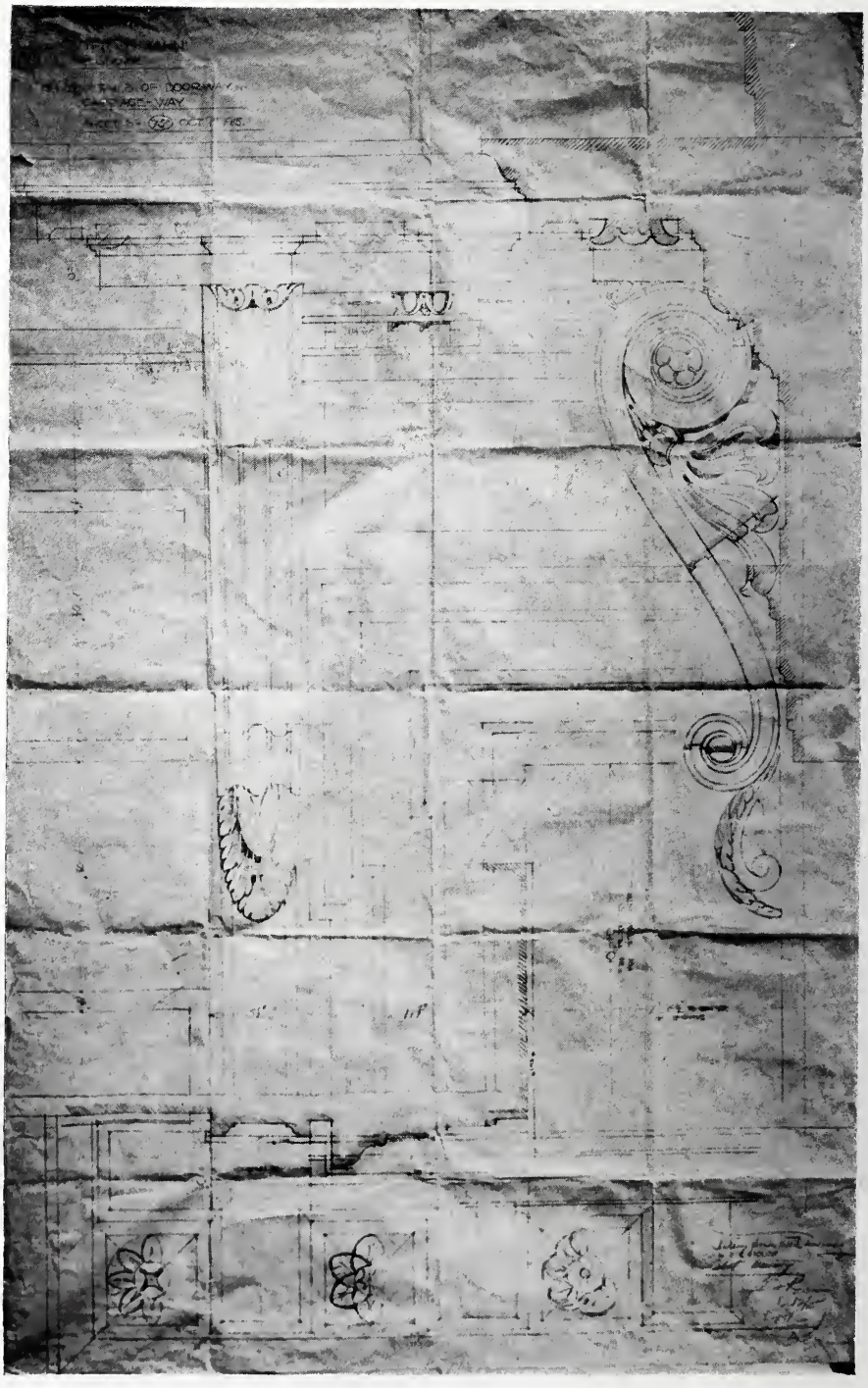
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TERRACE OVERLOOKING FIFTH AVENUE—RESIDENCE OF OTTO H. KAHN, ESQ., NEW YORK. J. ARMSTRONG STENHOUSE, ARCHITECT.



DETAILS OF DOORWAY IN CARRIAGEWAY—RESIDENCE OF OTTO H. KAHN, ESQ., NEW YORK. J. ARMSTRONG STENHOUSE, ARCHITECT.

conveniences and luxuries of the New York home exist to a degree that is inconceivable in a *cinque cento* mind.

Our interest in this work does not spring from an elaborate exposition of archaeological lore; this naturally exists, but as a matter of course. We welcome a precious quality—the infusion in modern work of a spirit that arose from complex conditions no longer existing; throughout the work we find an instinctive and spontaneous adjustment of every integral part to those imperishable standards which convictions long lost had created. Columns, corbels, arches, vaulting, mouldings and niches, subordinate individual beauty to contributory function, with the apparent ease habitual to mastery.

In this building contingencies have arisen through the establishment of certain fixed points, causing deviations from the characteristic symmetry of the period; these have been cherished as opportunities to the exclusion of obvious solutions, with the result that we enjoy delightful expositions of the manner in which the architect of the original period might have contrived his structure had the identical circumstance occurred.

Mr. Stenhouse's method of procedure in work is extremely interesting, and raises a question of great practical significance. An unusual faculty enables him to visualize his problem throughout its development, with infinite precision, to such an extent that he acquires a clear mental image of every part, from every angle, in full detail, and in its varying relation to all that adjoins. In his imagination he builds with such thoroughness that he wanders at will, in spirit, from room to room, through hall and stairways, in numberless critical excur-



CORNICE—RESIDENCE OF OTTO H. KAHN, ESQ., NEW YORK.
J. Armstrong Stenhouse, Architect.



STAIRWAY TO TOWER FROM SECOND FLOOR LANDING—RESIDENCE OF OTTO H. KAHN, ESQ., NEW YORK. J. ARMSTRONG STENHOUSE, ARCHITECT.



STAIRCASE DETAIL—RESIDENCE OF OTTO H. KAHN, ESQ., NEW YORK. J. ARMSTRONG STENHOUSE, ARCHITECT.



DETAIL OF BALUSTRADE—RESIDENCE
OF OTTO H. KAHN, ESQ., NEW YORK.
J. ARMSTRONG STENHOUSE, ARCHITECT.

sions, in which structure, proportion and detail are overhauled, until beauty results from an exquisite gradation of values. In these imaginary perigrinations, his extraordinary faculty for visualization permits the evasion of no decorative opportunity; as perspectives conjured unfold themselves, they are chastened to the fastidious standards of studentship.

This faculty, brought to bear upon every problem, brings enlightenment to one of the chief subjects of the Renaissance architect's training—the study of perspective, a science almost eliminated from the modern curriculum. Wherever details are available concerning the early studies of the architects and artists of that era, we find the study of perspective figuring as a subject of major importance. Great value was obviously attached to the faculty of assembling in mental image the items contemplated, with all the modifications resulting from proximity or distance. The development of this faculty is no longer the subject of special training or concentration, and there are few architects today capable of visualizing an interior with a precision that anticipates the results of foreshortening in their elevations.

The study of perspective was a mental discipline instituted to compel the student to think in the three dimensions, and to stimulate an appreciation of the mutual relation of architectural items; a deficiency in this capacity is the predominant shortcoming of a large proportion of American architects today; a revival of the science of perspective should be matter for serious consideration by the heads of all architectural schools in this country.

Mr. Stenhouse has developed his faculty for tentative imaginary construction to the utmost serviceableness; one is conscious throughout this residence that his mind's eye has traversed the quadrant, weighing each perspective from every angle, so that no separately conceived thoughts can make collision as construction brings them together.

Great dignity and simplicity characterize the exterior of the Kahn residence. In general conception it conforms to the principles that govern design in many of the Italian Renaissance palaces, insofar as the treatment of masonry is concerned and the relative decorative importance of superimposed tiers of windows. The pilasters decorating the second story are very beautiful, with all the refinement found in their prototypes. The balustre motif, introduced with such excellent effect throughout exterior and interior, contributes a note of great delicacy in its connection with window openings.

The spacing of the façade leaves nothing to be desired; subtle calculation in projection and proportion of moulding members are a source of permanent delight to the beholder. The cornice, to which the scale of our illustrations cannot do justice, is unique in feeling without sidestepping convention; the Roman treatment of sharply cut acanthus, which the Renaissance sculptors frequently chose for inspiration, is here modified with softened curves and gentler transition from light to shade, without any diminution in strength or character.

On the north side a terrace overlooks Fifth Avenue, approached by steps from the loggia. The landing forming the return of the steps to the loggia level is ingeniously supported by a beautiful bracket resting on a short massive pier beneath the loggia, thus permitting an additional glimpse of the court. This is a minor instance of the Stenhouse manner of evolving a charming incident, from an occasion predestined for an obvious solution. The north wall of the house, rising from the terrace, does not conform to the fenestration of the façade in the second story; additional value is contributed to the loggia arches by the comparatively unpierced areas of wall surface.

The focus of architectural interest of the exterior lies in the court. From every angle of inspection architectural grouping of great beauty occurs. It is approached from the house by descending steps designed with infinite simplicity and grace. The loggia rises on two sides of the court, from which delightfully foreshortened views of the tower and cornice are enjoyed. It is rare to

find a subject lending itself to such boundless variety in the combination of its structural features; at each step a new grouping of mass and line combines through the architect's masterly calculation and forethought.

Seldom such a quality of richness results from the ultimate elimination of all that might be regarded as elaboration; there is a feeling that detail serves to emphasize plain surface; it is of the simplest character, and carved with mastery. Variation of treatment in the wall spaces beneath the loggia is wrought with considerable success, adding much to the general picturesqueness of the setting. The tower owes part of its grace and charm to the clever treatment of its fenestration. The main entrance and covered carriageway are well in accord with the general dignity of the design and present many items of interest.

On the roof a glimpse of Italy, in more intimate guise, surprises the visitor in the form of a small garden house, arched porch and fountain; while from the cornice-balustrade a gorgeous view of New York and Central Park extends.

A short magazine article is quite inadequate for such a subject, and a mass of architectural achievements of great interest and educational value, must necessarily go unrecorded. The interior is, if possible, more beautiful than the exterior; but a natural aversion on the part of the owners to see the interior of their home illustrated, makes this a closed subject. Mr. Stenhouse has achieved a work which ranks as the foremost of its kind in this country.



CHURCH OF ST. ANTHONY, PADUA.
Etching by Dewitt H. Fessenden.

SOME PRINCIPLES OF DESIGN AND CONSTRUCTION IN CHURCH BUILDING

BY CHARLES H. MOORE

IN the following remarks on principles of design and construction in church building, I shall have mainly in mind simple church edifices suited to the needs of rural communities, and to average congregations of large towns. But it is obvious that the same principles will apply to all churches, on whatever scale, or of whatever degree of elaboration.

The short history of church building in our country is naturally not conspicuous for record of achievements. In New England the Puritan settlers thought little of what may be called architectural amenities in their churches, both because conditions of life were too hard with them, and also because of their aversion to all that might savor of association with the religious tyranny from which they had escaped. They sought only to provide bare accommodation for public worship at the smallest expense. A barn-like framework of wood, clapboarded and shingled externally, and lathed and plastered within, gave all they required.

But as conditions of life ameliorated, and the growth of towns increased, the churches of urban communities were more substantially built, assumed a somewhat ornate character, and were finished with spires in what has come to be known as our Colonial style—a style derived from Wren's city churches of the mother country—examples of which, in varying degrees of conformity with the originals, are still the leading features of many New England towns and villages. In New York, where the Dutch element prevailed, and in the South, where the communities were not Puritan, the primitive churches had been more frequently built of stone, but had little more architectural character.

It might seem a pity that in a country so largely settled by the English, and where English ideas and customs became dominant, a style of church building like that of rural England could not have been established; for in no other country of the world does the rural parish church have so sweet an expression of homely religious sentiment, or mate so charmingly with the landscape. But it could not be, nor was it really desirable. For church building, like every other kind of building, is naturally and inevitably an outgrowth and expression of conditions, and conditions were very different in Colonial America from what they had been in the England which produced the old English parish church. The English parish churches of which I speak, are historic monuments, and owe their character and charm largely to the fact that few, if any, of them were built at one time. Many of them are the better part of a thousand years old, that is to say, they are Norman structures of the eleventh and twelfth centuries, and some are, at least in part, even of Saxon build. Although more or less altered and enlarged during the ages, many of them retain much of their primitive character, and where this character has been largely lost by alterations and additions, the changes are of all degrees of antiquity from the time of original construction; so that the architectural history of England is largely epitomized in the parish churches. Thus, for this reason, if for no other, the old English church could not furnish the model for Colonial America.

With the passing of Colonial times, and since America became great enough in population and wealth to build without parsimony, conditions have not been

favorable for the growth of any consistent style of church building. Our mixed communities include so many elements, representing so many different ideas, that no common aims and efforts, such as are essential to the development of a national style, have hitherto been possible. It should be obvious that in order to produce any respectable form of church building, certain fundamental principles of design and construction must be observed. Let us consider some of these principles.

In church building, as in house building, we naturally derive our ideas from European traditions. For almost all styles of church building of the past in Western Europe, the ancient so-called Christian basilica has furnished the model as to plan. This plan has, however, been endlessly varied in its proportions, has been amplified in manifold ways—as by transepts, by projecting chapels, by towers, and by porches. The ancient typical form was that of an oblong rectangle, with side aisles, a rudimentary transept at the extreme east end, and an apse. In its simplest form it is little more than an oblong rectangle with an apse. I think this general type is likely to persist in America as well as in Europe. Therefore in what follows I shall assume that the main body of the church will as a rule be rectangular on plan, though there is no reason why it should not have any other form that may be thought preferable.

In elevation the character of the building will naturally be determined by the systems of construction adopted, and the materials employed, as we shall presently see.

In living architecture, i. e., architecture governed by rational principles, in which borrowed things are adapted to the uses for which they are employed, there can be no mere imitation of any former styles. The styles of the past belong to the past, and no architecture proper to ourselves can arise so long as we affect to build in any Romanesque or Gothic or other foreign style. Only in so far as we can assimilate, and thus make our own what we find in those styles, can we rightly use them. If we assimilate we shall more or less, though unconsciously, recreate what we borrow. It is in this way that true styles are developed. The old art of Europe is a rich inheritance, in entire independence of which we cannot, if we would, work to advantage. But the way to profit by the old art is to master its principles, and to be guided by these principles in so far as we find them suited to our needs. Any other sort of imitation is fatal to the development of a living art.

Suppose we have a village church to build, and that it is to be of brick or stone, with a timber roof. On plan it may be a simple rectangle, with proportions of length to breadth such as may be thought most convenient. In carrying out the scheme we have only to build the four walls, to roof over the enclosed space, to make a floor, and to add such interior fittings as may be required. There will be no need for any excavation of the ground, unless it be for a small cellar for the accommodation of the heating apparatus and the storage of fuel; for the floor may be made directly on the ground in the manner described in my former article on domestic building.*

The walls of a church need not be built hollow, but they should be well provided with damp-proof courses on the footings, and above the ground level. Construction will call for no members breaking the wall surfaces—for a trussed timber roof exerts no thrusts requiring abutments. In a brick or stone building, the windows and doors will naturally be arched, and the form of the arch may be either semi-circular or pointed, according to aesthetic preference, since in such a building there is no structural ground for the use of one form rather than the other. In a church, abundance of light is important, and the windows may be made as large as safety will allow. To obtain the maximum of light from a window, the glass should be set near the outer face of the wall, and the jambs should be splayed internally.

As for ornamental treatment of brickwork, there are many natural possibili-

*Some Principles of Design and Construction in Domestic Building. Architectural Record for November, 1918.

ties—as the use of differently colored bricks and different modes of laying them—into the details of which we cannot go in a brief paper. It may be said, however, that although buttresses are out of place in a timber roofed building, there is no reason why the exterior wall surfaces should not be broken by pilaster strips carrying arches over the windows; and these features may have structural function, as well as ornamental value, in stiffening the walls—which with them may be built lighter than they otherwise should be. Among other ways of relieving the monotony of brick wall surfaces is that of the use of stone for string courses, jambs, and archivolts, on which, if further enrichment be desired, mouldings and other ornaments may be worked.

For window enclosures, metal frames and sashes ought to be used, and these may be filled with grissaille or colored glass.

As for the roof, it may either be left open internally, exposing the framework to view, or it may have a flat ceiling. It must be strongly trussed, and braced longitudinally. There is only one proper way to construct a truss, and that is with a straight tie beam frankly placed at the feet of the rafters, so that no thrust shall be exerted against the walls. Any ornamental treatment that does violence to this prnciple ought to be avoided. The only members needed in a truss, not exceeding the span of an ordinary village church, are: the rafters, the tie beam, a king post, and a strut on either side of the king post.* No departure from this principle can be justified on any grounds. Rational construction is the first condition of good architecture, as of good building. But this simple truss may be ornamented in various ways, as by chamfers and mouldings, or even by curving a little the inner sides of the principal rafters, or by ornamenting the members in any way that will not destroy their functional character and expression.

The best timber for the roof is oak, but chestnut is also strong and durable. Under modern conditions the timber will generally be sawn, and if the roof be open, it will be planed. But these modern processes do not give the pleasant character that the old-time hewn timberwork has, and it is better, I think, to follow the old methods wherever practicable.

If there be a flat ceiling, it need not be made with an unbroken surface concealing the tie beams of the trusses. It may be formed by smaller beams reaching from the tie beam to tie beam, with the ceiling planks laid on these beams. The ceiling will thus consist of long coffered panels, marked off from one another by the tie beams, and will have an agreeable variety arising out of the construction. No artificial coffering from ornamental motives is justifiable from the point of view of rational design. In good architecture, construction itself becomes ornamental—which does not mean that there should be no ornament save that of construction, though it may be said emphatically that true ornament does not falsify construction, i. e., does not simulate construction foreign to the real structure.

Where pine, or other soft wood, is used for the roof, a Japan stain will give a pleasant effect, and preserve the wood; but oak and chestnut are better without stain or varnish.

The internal wall surfaces, whether of brick or stone, may well be left plain. If the walls be plastered internally, the plaster may be laid directly on the brick or stone; but ashlar walls will naturally be without plaster. A wainscot of wood, reaching up to the level of the window sills, will give a shield against cold and dampness from the walls.

If we build the walls with stone, their character will depend on the kind of stone employed. A village church may be built substantially, and with good effect, of small roughly broken stone of any good quality; but with such stone the buildings should have quoins, jambs,

*The old timber roofs of English churches are rarely trussed in a straightforward and effective way. A mistaken desire to avoid the tie beam, in its proper form and place, led the old English builders to resort to complicated and irrational modes of framing their roofs. I have discussed this matter at some length, in my *Medieval Church Architecture of England*. New York, The Macmillan Company, pp. 208-217.

and archivolts of large stones. If we build the walls of ashlar, then the masonry will naturally be of the same character throughout.

We have assumed that the main body of the building is to be in the form of a simple rectangular enclosure without aisles. But it may be desirable to have side aisles. In that case the aisles will naturally be lower than the nave, and the nave will then be divided into three stories—the ground story, the triforium, and the clerestory. The ground story will thus become an open arcade.

But suppose we wish to build more monumentally, and are prepared to meet the cost of the best that can be done. In this case the church may be vaulted with stone, either wholly or in part. If there be a chancel, this part alone may be vaulted. It may happen that a community can afford to vault the chancel, when it cannot afford vaulting over the main body of the church; and there is propriety in giving special dignity to the chancel. We will here assume, however, that the whole structure is to be vaulted.

But since vaulting has been little practiced in modern times, and practically not at all in America, it will be necessary to look for guidance to the old European examples of monumental church building, and feel our way to proficiency in the craft. As for the kind of vaulting to adopt, we shall naturally not revert to the ponderous ancient forms that were superseded, during the great building activity of the Middle Ages in Western Europe, by better forms. There has never been any vaulting of churches comparable to that of the French Gothic builders of the twelfth century. This is the best, because it gives the maximum of strength with the minimum of weight and thrust; and because it does so with consummate grace and beauty. The principles and methods of this vaulting are entirely simple, and there is no reason why it should not be freely practiced in this country, after some preparation on the part of architects and craftsmen.

But if the church is to be thus vaulted, its whole structural character must be changed. In place of unbroken walls it will require isolated supports, in connection with which walls are not structurally necessary. The nave will have to be broken up lengthwise into a series of rectangular compartments, and each of them covered with a ribbed groin vault.

Since any groined vault, rectangular on plan, requires support only at the four corners of the rectangle, piers built up at these points, and fortified by buttresses, are, in a building without aisles, all that the structure requires to carry the vaulting. Thus walls are needed for enclosure only, and may be lightly built, or altogether omitted above a level that will give convenient enclosure—their place being taken by open lights.

The vault in each compartment consists of a skeleton of ribs, and of webs, or panels, triangular on plan, that are formed over the ribs. The main strength of the vault resides in the ribs, and the only ribs required in any vault, rectangular on plan, are: (1) transverse ribs—ribs spanning the nave crosswise; (2) groin, or diagonal, ribs—ribs spanning each compartment diagonally, and thus intersecting in the centre, and (3) longitudinal ribs—ribs spanning the sides of the compartment that are parallel with the long axis of the building. These ribs make a permanent centring on which the panels rest.

In logical composition such vaulting requires a support for each rib on each side of the nave, and the best form for this support—the best because the most effective in function, and the most assuring to the eye—is that of a shaft incorporated with the pier. This gives a group of three shafts on the face of each pier, and as the ribs of the vault will be of different magnitudes, according to their different functions—the transverse rib the larger, the groin rib smaller, and the longitudinal rib the smallest—the supporting shafts will naturally be correspondingly graduated in their magnitudes. And it is worth while to note how this gradation of proportions in conformity with structural conditions, gives an element of beauty to the composition. Ordered gradation of magnitudes, where it grows out of the exigencies of struc-

ture, is a primary cause of beauty in architecture, as in natural organic forms.

The pier, with its shafts, bears the weight of the vault, but a strong buttress is required to meet its thrusts. This buttress, in a building without aisles, such as we are now considering, will best take the form, in horizontal section, of an oblong rectangle with its long sides perpendicular to the long axis of the building—thus giving the maximum of resistance to the vault thrust and the minimum of width against the pier. It should be carried up so as to reach at least as high as the crown of the vault, in order to meet all thrust, the extreme height of which can hardly be determined with precision. The best form, in elevation, for such a buttress is that which gives an almost sheer vertical line to the outer face. It may be slightly enlarged at the base, and have one or two shallow offsets, and a gabled coping.

In building the vault, the ribs are first set up to form a strong skeleton. These ribs should be formed and adjusted so as to secure the utmost strength in the vault with the least amount of thrust. To this end they will need to be more or less pointed. The degree of acuteness of the pointing will be determined in each rib by the length of span and the height to which we wish it to reach. Thus the groin ribs, since they have the longest span, will naturally be the least pointed, and may sometimes be hardly pointed at all. It is desirable, in order to obtain an agreeable conformation of the vault, to have the crowns of the ribs all on nearly the same level. But vaults on these principles may differ greatly in these respects, according to their proportions on plan, and the height above the springing to which they are carried.

The strength of the whole system will depend greatly on effective adjustment of the several ribs in the vault to the pier and buttress, so that the thrusts may be gathered as compeltely as possible on them. The necessary concentration may be effected by stilting the longitudinal rib, that is, by prolonging its supporting shaft, so that its springing shall be at a considerably higher level than that of the other ribs. This will keep the vault conoid narrowed against the pier, so that the buttress may cover it almost to the haunch.*

The ribs thus formed and adjusted, the panels of the vault may be formed on them, by courses of masonry reaching from rib to rib—each course being arched a little. The conformation of the surface thus developed in each panel will be pleasantly irregular, like that of a natural shell. It will be warped and twisted more or less, and in some parts considerably, as it is shaped to the ribs; and the mason, as he walks along, will have to cut some of the stones to a gore shape in order to form the hollowed surfaces that will naturally arise. Between the panels of adjoining vaults, so-called pockets will be formed, and these must be filled with rubble and cement up to a level that will cover the haunches, so as to consolidate this part against the pier and buttress.

If the chancel have an apse, semi-circular or polygonal on plan, the ribs of its vault will, of course, converge on a centre.

Over the vaulting there must be a timber roof, because if exposed to the weather it would disintegrate. This roof will be framed as before, but, as it will not be exposed to view internally, it will naturally be built of rough timbers; and the walls over the arches of the openings must be carried up high enough to allow the tie beams to pass over the crown of the vault.

The windows, in such construction, may be as large as we choose to make them, up to the entire width between the piers and the space beneath the arch of the vault and the enclosing wall below—when they will become veritable intercolumniations. For in this mode of building, the strength lies wholly in the piers, arches, and buttresses—walls being required only for enclosure, as already remarked, and for enclosure a low curtain wall is enough. If they be so large, they will need to be each divided into two or more lights by mullions, and to have their heads filled with some form of tracery, for which the early Gothic

*Cf. my *Development and Character of Gothic Architecture*, New York, MacMillan Co., pp. 130-144.

art of France affords excellent models. Whether the openings be large or small, it will be natural to have all their arches pointed, in harmony with the larger structural system, where this form is demanded by the exigencies of the vaulting.

If there be aisles in a church thus vaulted, giving three stories to the nave, as before remarked, then the piers will stand free on the ground story, and have vaulting shafts on the aisle sides; which, together with responds built against the buttresses will carry the aisle vaulting. In this case we must have flying buttresses, because buttresses placed as before would block the aisles. Therefore the great buttresses must now stand against the aisles, and over the aisle roof the intervals between them and the nave must be spanned by half arches springing from them, and abutting against piers. But into further details of such construction we cannot go in a brief paper.

The tower of such a church may well be crowned with a stone spire, which will naturally be octagonal on plan—its diagonal sides being carried on squinches in the tower angles. If a vertical drum be interposed between the tower and the spire, the transition from the one to the other will be less abrupt than if the spire be made to rise directly from the tower. The tower will require to be well buttressed on the angles, and if on the buttresses, pinnacles covering the angles be built against the drum, the composition will be both logical and pleasing to the eye. This is the form in which the best mediaeval towers and spires are built, and I do not think it can be improved. The principle is nobly embodied in the south tower and spire of the Cathedral of Chartres, which has the merit of entire structural logic, and also of that architectural sobriety which characterizes the finest art.

As for structural details, as bases, capitals, and cornices; and for the profiling of vault ribs, archivolts, string courses, and mullions and tracery, we may best here, as in the larger structural system, base our practice on the works of the French craftsmen of the greatest age of church building. Capitals and bases of these craftsmen were evolved out of older forms by rational adaptation to new conditions. The evolution started, indeed, before the days of Gothic art, in that wonderful Byzantine system of construction that is so nobly embodied in the great church of St. Sophia of Constantinople. The new conditions that were here first properly met were those of arched construction. The capitals and bases of the ancient orders had been designed to meet the requirements of a trabeate system, and no recreation of them to suit an arched system had been effected until the Byzantine Greeks produced those remarkable new forms that appear in St. Sophia. The capitals of the arcades of this church are perfectly formed for their function of preparing a relatively small round column to carry the bulky square load of an arch.* The French builders laid hold of this Byzantine capital, and developed it creatively with wonderful fertility of invention, answering to the varied new structural and aesthetic exigencies of their unique system.

On the principles of these perfected forms we shall do well to base our efforts to form capitals suitable for such building as I have here suggested. We shall need to study well the French models, in order to master their principles, and to work with intelligence and freedom on kindred lines. We must bear in mind that in architecture the satisfaction of the eye concerns the designers at every step as much as purely structural matters, and that the two are inseparable in good design. That aesthetic quality and structural function are one in architecture, is a fundamental principle that will suffer no violation. The bulk of the arch load being larger than that of the supporting shaft, the capital must expand from the necking upward; and if the arch section be square, the abacus must be square on plan to agree with it. The designer will perceive that the proportions of the parts of the capital will be largely governed by the relative mag-

*I have discussed these capitals in my *Development and Character of Gothic Architecture*, pp. 304-306.

nitudes of the arch impost and the supporting shaft.* Keeping hold of this principle, he will be able to shape his capital with propriety and beauty. There can be no hard and fast rules for such things, in any fine art, and in capitals the possible variety in proportions and details of form is practically without end. In the pure French Gothic art, one capital will never be found exactly like another.

As for the base, it would be hard to devise a better form than that which the French builders associated with the capital just described. Like the capital it is an evolution, through many changes, out of an ancient form; and consists of two tori and a scotia with two fillets, set upon a square plinth—the angles of the plinth being covered with a spur from the lower torus. The relative proportions of these parts may vary indefinitely, like those of the capital; and their profiling gives scope for endless subtleties of curvature.

Vault ribs and archivolts may be appropriately adorned with simple mouldings. If the ribs be square in section, the plain roll of the French builders, worked on each edge, can hardly be improved, and the profiling of the archivolts of openings will naturally follow that of the vault ribs. In all these details, the designer of artistic feeling and experience will appreciate the value of restraint, and will remember that a somewhat severe temperance of adornment marks all finest art.

But in additon to the general shaping of structural members, some purely ornamental carving will be required to relieve the baldness of mere structure, and give pleasure to the eye. And here again we shall find profit in the study of French Gothic art. For in no other style of building has carved ornament attained such beauty of form, and such perfect architectural quality. In order to profit by this example, we must here as before, lay hold of principles, and not merely imitate forms. The leading principles of the French ornamental carving of the twelfth century—the time of its supreme excellence—are: (1) rhythmical arrangement of bosses of stone, (2) expression in them of the beauty of natural things, (3) moderation in quantity of ornament, and in flexures and convolutions of line and surface, (4) subjection of what is taken from nature to the natural conventions of stonecraft, and (5) harmony and breadth of total effect. The members that will chiefly call for ornamental carving are: Capitals, archivolts and jambs of doorways, and string courses, including cornices. Vault ribs are better left plain, though a carved boss at the intersection of the diagonals may well be included. External string courses will naturally be steeply weathered, and in the sheltered part under the weathering—which should be hollowed so as to cut off the drip—ornamental carving will be effective, either in the form of a running meander, or a series of foliated, or otherwise ornamented, bosses.

But the member that will chiefly call for ornamental carving is the capital, the form and position of which lend it with peculiar fitness to such enrichment. In designing this ornament the workman needs to be imbued with a sense of the vital beauty of organic nature—the source of all highest beauty in art—and with the principles of effective treatment of stone. Good architectural foliation is severely lithic in expression, and only the abstract lines and surfaces of natural plant forms lend themselves to this expression. Therefore no realistic elaboration of the finer details of nature can have place in effective architectural carving. The production of such carving must, under existing conditions, take time for development; for no body of men properly bred to the craft now exists. It therefore behooves the aspiring craftsman to study well what was done on these lines when ornamental carving on buildings was a living art. If we examine any fine twelfth century Gothic capital we shall see that the leafage is not like something merely affixed to it, but that it has the character of an integral part of the member—as it were, growing out of it. With its origin at the necking, where it has little

*Cf. my *Gothic Architecture*, pp. 309-314.

relief, it expands with the form of the bell, and becomes more salient as it rises, until, under the angles of the abacus, it develops into great bosses that seem to fortify, while they enrich, these overhanging parts. And it is worthy of notice that whatever degree of profusion the stone leafage may have, it is never, in this French work, allowed to obscure the form of the capital as a whole. And I think it may be taken as a constant principle that good architectural carving, in whatever part of the building it occurs, never obscures or falsifies structural forms.

The modern designer of carved ornament, in following the principles of this best foliate sculpture of the past, has in plant life an unlimited range of materials from which to gather ornamental motives. He needs only a quick eye for beauty, disciplined by a critical habit, in obedience to which the accidents and deformities of nature are corrected by principles drawn from nature herself; and a ready capacity to translate the beauty of nature into architectural terms.

How far representations of human and animal life are likely to enter into the ornamental carvings of modern churches, I do not know. Whether churches will ever again be clothed with sculptured imagery, as in the Middle Ages, is a question that only the future can answer. The conditions of life and thought that gave rise to the great mediaeval architectural imagery have passed away, and no revival of it is either thinkable or desirable. With what outward expression the religious thought of the future will be manifest in the Christian temple, we cannot foresee.

But the natural human craving for ornamental carving will no doubt demand satisfaction in the future, as in the past; and modern church building will have, sooner or later, to respond to the demand. In order to do so, however, we must have bodies of competent craftsmen, and such craftsmen cannot be mere mechanics. The workman in ornament must be himself the designer, or must at least have freedom enough to exercise his own artistic feeling in what he does with his hand. Good ornament cannot be a mechanical reproduction of a set model. Mechanical repetitions of set models can have no place in the living art of the new age that is dawning.

The Hampton Normal and Agricultural Institute Hampton, Va.

Ludlow & Peabody, Architects

By John Taylor Boyd, Jr

THE Hampton Normal and Agricultural Institute, of Hampton, Virginia, has long been familiar to the popular mind as one of the chief centers of the education of the negro race. Since we are interested mainly in the architecture of the Institute, we may spare only the briefest reference to the unique character of this splendid school. It was in 1868 that Hampton was founded by a Civil War veteran, numbered among the most skillful leaders of the Union army, Gen. Samuel Chapman Armstrong. In his project to advance the education of the negro he obtained the aid of a few public-spirited men, who with him perceived the great need of aiding colored men to give direction to their development in their recently acquired freedom. One of these earlier helpers of Gen. Armstrong was Robert C. Ogden, whose broad vision included not alone Hampton, but gradually extended itself until it embraced plans of effective aid to education in the southern states as a whole, white as well as black.

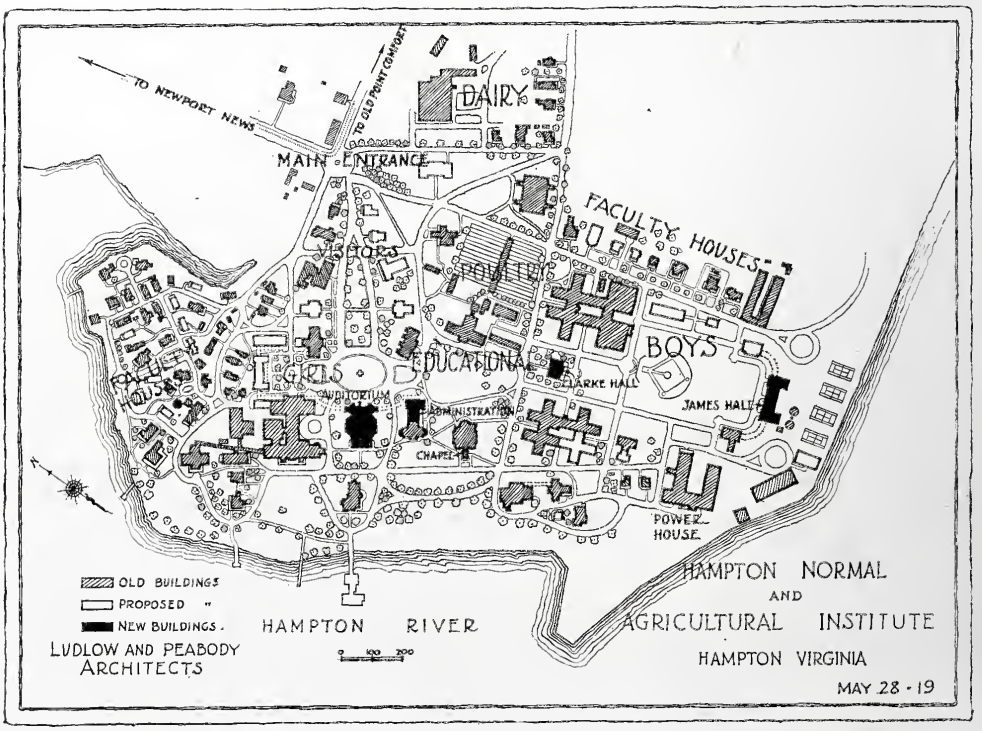
The aim of the school has always been a direct practical one—to develop teachers for the negro race. It is vocational, though it gives training in vocations only with the idea that its pupils will pass their training on to others by teaching it. Especially do Hampton's sponsors encourage the agricultural side of the school, for they recognize that the majority of the colored race may be found on the farms, and they feel that the negroes are better off and happier there. A common sense program indeed, one capably carried out in an atmosphere of inspiring enthusiasm and bustling activity, both on the part of white staff and negro pupils.

The character of the school is reflected in the architecture in a fitting way, even as regards the earlier buildings. Hampton Institute is indeed fortunate in its beautiful site. It is built on what was once luxuriant old Virginia farmland, a few miles from Old Point Comfort, low and level along the tidewater of the Hampton River, which bounds the property on the west. Boats, fishing smacks and other seacraft are frequent on the river, and lawns, gardens, occasional houses and many trees stretch along the opposite shore. On the site two fine old farmhouses exist, attractively woven into the plan of the institute. Thus Hampton, its grounds rich in foliage, has both the warmth and luxurious beauty of the southern vegetation and also that other quaint beauty given by the sea, of soft moist salt air, deep cool greens of trees and shrubs and vines, the fascination of boats, of fishing, of nearby canals and marshes, into which little black boys drop lines from bridges —a touch of the flavor of man and the trimness of his property in old sea towns —all the ancient attraction of the ocean. Much of this old charm of sea and southern farmland has been somehow preserved in Hampton and is perhaps its keynote. One must think of the school in this somewhat quaint, intimate, unobtrusive aspect, rather than as a formal or monumental institution. In fact, the first buildings were arranged in a haphazard way and it was only after a dozen of them were built, either of a dark tan brick or of a red pressed brick,

that Messrs. Ludlow & Peabody came upon the scene to bring some order into the group plan. And with good judgment they have not attempted to push symmetry too far. The semi-public buildings—auditorium, library, administration—are worked into a court or campus with a little court opening north for the dormitories of the girls; and another court grouped south of the teaching buildings is intended for the boys' dormitories. As a result, symmetry is more apparent in the plan than it will be really when the remaining buildings take their places in the scheme, and thus the informal intimacy of Hampton Institute will never be lost. It is hardly necessary to explain the arrangement of the general plan in further details. The planning of Ludlow & Peabody is the work of experienced architects who have had the good sense not to overdo. Their design has a more significant interest for the profession, to be shortly explained.

Does the architecture of Hampton aim to express the negro? This question may well be asked and it is pertinent. It may be answered by saying that on the whole no extreme attempt is made to make the Institute expressive of the budding aspirations of the negro race. It is easy to see that the architects might have gone too far, might have been led astray into sentimentality or even into absurdities. In this matter we need not enter into the brambles of any discussion of the philosophy of races. After all, looking at Hampton in a matter-of-fact way, it is simply a school in the south, under southern skies, in a southern community, for the education of young negroes, founded, financed, controlled and taught by white people. When this fact is realized, any self-conscious attempt to create a negro or negroid architecture will appear absurd. In any case, such an attempt must be left to the negro himself.

If we, then, consider Hampton Institute architecturally as a southern school in which whites as well as blacks have a share, it should be apparent that its character is beautifully and harmonious-

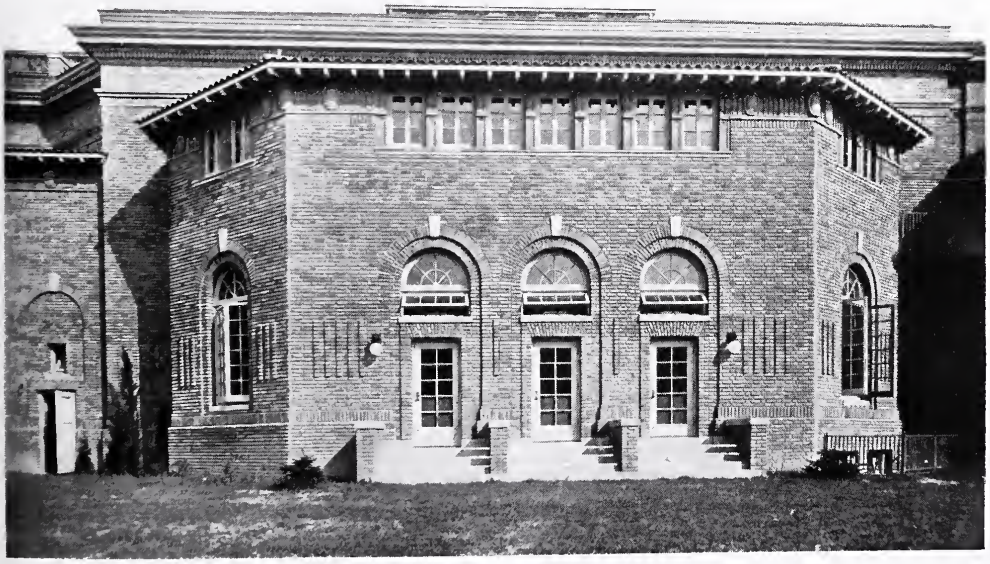




OGDEN HALL, HAMPTON NORMAL AND AGRICULTURAL INSTITUTE, HAMPTON, VA.
Ludlow & Peabody, Architects.

ly expressed in grounds and in buildings. Though none of the earlier buildings are remarkable, none of them are really bad, and they do not appear out of place in the lively Virginia landscape. It is fortunate also that the buildings designed by Ludlow & Peabody are by far the most important ones, in the most conspicuous locations, and that they impress their character on the whole far out of proportion to their number. It is these few new buildings, chiefly Ogden Hall, the auditorium, that are of interest to us.

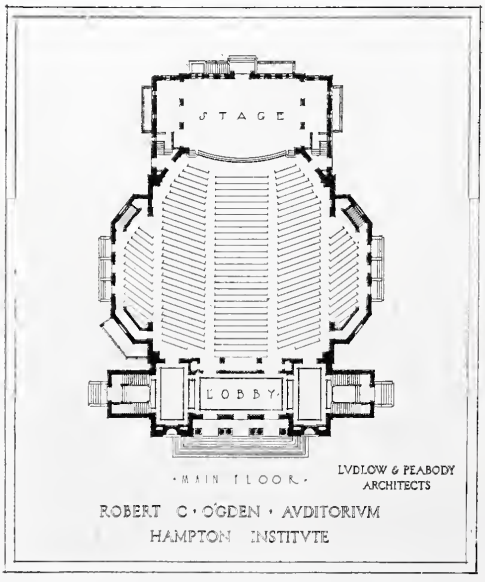
When one sees Ogden Hall one will conclude that it has a significant striking

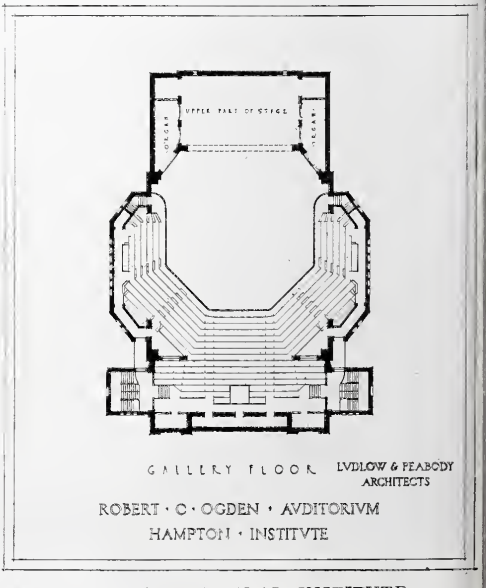


SIDE ELEVATION—OGDEN HALL, HAMPTON NORMAL AND AGRICULTURAL INSTITUTE, HAMPTON, VA.
Ludlow & Peabody, Architects.



REAR ELEVATION—OGDEN HALL, HAMPTON NORMAL AND AGRICULTURAL INSTITUTE, HAMPTON, VA.
Ludlow & Peabody, Architects.





FLOOR PLANS—OGDEN HALL, HAMPTON NORMAL AND AGRICULTURAL INSTITUTE, HAMPTON, VA.
Ludlow & Peabody, Architects.



FRONT—OGDEN HALL, HAMPTON NORMAL AND AGRICULTURAL INSTITUTE, HAMPTON, VA.
Ludlow & Peabody, Architects.

merit beyond most designs in American architecture. That is the merit of beautiful, rich color—strong harmonious colors in the building perfectly attuned to the brilliant coloring of the sky and to the vivid green of trees, greensward and hedges, which seem to vibrate in the southern sunlight and take from it its tinge of gold. As we look longer at the picture made by Ogden Hall in its setting one sees that its quality of color is found oftener in painting than in architecture. It is curious that, after all that has been talked and written on color, architects should fail on this essential point so continuously. Almost any capable practitioner can pick out an "interesting" brick, a pleasing stone, for his walls, or a soft colored slate or shingle or tile to make his roofs look well, judging each time whether the color and texture conforms more or less to certain universal standards. But what he rarely does is to study those local colors as a whole, combining them into a strong rich key that takes its place integrally in the brilliant sunshine of the American landscape. In fact, so strong is the influence of certain sunlight, particularly towards the south, that it really determines the key of color of any landscape in which architecture is set. A combination of color harmonious in itself or in certain localities, may not be in key with the sunlight elsewhere. It is the sunlight and not the sample room that is the real test of color of materials in architecture.

No one could find a better example of this truth than at Hampton Institute, standing in front of Ogden Hall. The roofs are tile of the color of Venetian Red, the walls of a warm tan yellow—bricks varying from light yellow to yellow sienna and chrome yellow and scarlet, laid in yellow raked mortar joints. The stone columns are a pinkish colored



AUDITORIUM, LOOKING TOWARDS STAGE—OGDEN HALL, HAMPTON NORMAL AND AGRICULTURAL INSTITUTE, HAMPTON, VA.
Ludlow & Peabody, Architects.

artificial stone, the entablature and bell courses of a terra cotta in color light burnt sienna. The only whitish colors are the very slight white touches of window frames, of gutters and the rafter ends of the tile roof, and of the rather deep yellow gray base course and steps of the building. These touches, however, are eaten up, as it were, by the strong play of colors of the materials against which they are set, and it is to be noted that edges are so softened that



AUDITORIUM, FRONT STAGE—OGDEN HALL, HAMPTON NORMAL AND AGRICULTURAL INSTITUTE, HAMPTON, VA.
Ludlow & Peabody, Architects.



DETAIL—RECREATION BUILDING (CLARKE HALL), HAMPTON NORMAL AND AGRICULTURAL INSTITUTE, HAMPTON, VA. LUDLOW & PEABODY, ARCHITECTS.



RECREATION BUILDING (CLARKE HALL), HAMPTON NORMAL AND AGRICULTURAL INSTITUTE, HAMPTON, VA.
Ludlow & Peabody, Architects.

they hardly are noticed at all. This last particular, excessive lines and edges, is one of the vices of our modern architecture, both exterior and interior. From this luminous, overwhelming impression of unity, let the visitor turn his eyes toward the library at the right. Here he will see a building of the usual, inevitable type—limestone portico and entablature and window sills, flat stone dome above, the walls of brick, dark red in character, with strong white joints—such as one sees throughout the United States. It is no better or worse than a thousand designs of capable architects. Yet one must agree that the effect is spotty, restless. Every line stands out, slight defects of proportion are revealed clearly. Its colors are more subdued than those of Ogden Hall, yet they do not blend and obviously they do not melt into the sunshine. In fact, this library building seems to be in a different landscape from Ogden Hall. Nevertheless, were Ogden Hall not at hand for purposes of comparison, many people might find the library a fairly satisfactory building. How long will it be before American architects appreciate the painter's eye for color in buildings in landscape?

Aside from its color, the design of Ogden Hall is interesting. The front recalls the façade of the Pan-American building at Washington. It is not so strikingly monumental, for Hampton demands a more informal treatment. Its upper portions seem better handled than in the Pan-American building, the splendid classic character of which is somewhat marred by the use of too many elements and by the too frequent breaking of lines and bands of cornices, sloping roofs, flat roofs and balustrades and buttresses. Interesting, too, is the comparison in the two buildings of the relation between side and front elevations. In the Pan-American the window motive at the end pavilions of the front is carried around the side elevation and repeated there without variation or the addition of other ele-



ADMINISTRATION BUILDING, HAMPTON NORMAL AND AGRICULTURAL INSTITUTE, HAMPTON, VA.
Ludlow & Peabody, Architects.

ments—naturally a most perfectly classic arrangement. On the other hand, the designer of Ogden Hall has done a more informal thing by creating a charming side elevation, somewhat different and rather more informal than the front elevation; sacrificing necessarily the unity of design in the perspective at the corner. One cannot say, however, that the architects have not acted wisely at Hampton, both because the place is informal and because the side elevation of the auditorium is most important in itself. Details to criticize are the tiles of the roof, which one could have wished less thin and metal-looking in form, and less monotonous in color; the rafter ends and gutter of the same roofs which seem a little thin in detail; and the terra cotta which might have had more variety of color, too. This terra cotta work is interesting in the whimsical pattern of very much conventionalized sugar-cane spikes and watermelon, a quaint touch symbolical of the character of the school.

The interior of the auditorium will offer much of technical interest to the visiting architect. The artistic and structural difficulties of such a building have been successfully solved. The low sweeping proportions of the hall itself, the stage opening, and the large balconies are well above the average achievement. The capacity of the stage is 300, of the floor 1400 and of the galleries 800. An interesting detail is the great curtains hung under the balconies and above them, part way back from the front row, so that, when drawn across they greatly reduce the apparent capacity of the auditorium. They are to be used when the occasion is not important, and only a small audience is expected to be present, in order that this small audience shall not appear to be swallowed up in a great empty hall. Both for singing and speaking, the acoustics are perfect, nor are they the result of chance, for Mr. Hugh Tallant was consulted in this feature of the design and every effort was made to attain success. The color scheme of the interior is not yet carried



BOYS' DORMITORY (JAMES HALL), HAMPTON NORMAL AND AGRICULTURAL INSTITUTE, HAMPTON, VA.
Ludlow & Peabody, Architects.

out, so nothing may be said on this important point.

Ogden Hall is clearly the most important work of Messrs. Ludlow & Peabody at Hampton Institute, so far as regards its general interest to the architectural profession. They are, however, the designers of other work there. One may see numerous little alterations to old buildings, skillfully done, of those innumerable details for which architects are always called upon in a large group of buildings. Of complete buildings, James Hall, finished four years ago, is a large dormitory for boys, at the southern end of the group. It is simply done, on the roof is a great sleeping porch, especially desirable on account of the susceptibility of the negro to tuberculosis. One may complain that the window enframements are too noticeable, white against the tan brick, but this fault may easily be remedied at the next repainting. Clarke Hall, a club or Y. M. C. A. building, is an excellent design. Exterior wood and iron are here painted a dark green, and the roof is of dark slate to match roofs of neighboring buildings. Good colors, yet not so strikingly inspiring as Ogden Hall, which shows an improvement over these earlier works. In the administration building the architects have very cleverly incorporated an old building in the new.

In these Hampton Institute buildings, Messrs. Ludlow & Peabody have pointed a way for architects in the south to follow. In Ogden Hall they have taken a flight, successfully, into a region of color that few of their contemporaries dared explore. They have incidentally improved on their earlier work in the first buildings in the Teachers' College at Nashville, Tenn. As one travels through the south, one is always surprised at the lack of interpretation in present day work there, and not only in respect to color. There is an absence of the principles of planning that are evident in warm sunny climates, where people live outdoors in cooler months of the year and then seek the shade when warmer weather appears. Where are the courts, the arcades one expects to see? Indeed, notwithstanding the traditions of porches and porticos in old southern architecture, there are many houses in Connecticut which have more open porches, sleeping rooms, sunlit lounging rooms, glassed-in alcoves and terraces, than I saw in Memphis, Tennessee, which is far south indeed. In many towns one looks in vain for modern buildings that express something of the warmth, the sensuous charm, the picturesqueness of the south.

Everywhere there is Yankee architecture, often third rate Yankee, even more out of place in the south than in the north. The new buildings at Hampton point a way out of this unfortunate situation.

English Architectural Decoration

Text and Measured Drawings by Albert E Bullock

Part IX.—b

CHIMNEYPIECES of simple design were executed in the chief periods from Charles I to the early Victorian era, of which one of the most notable is that illustrated here from the library at Ashburnham House, Westminster, where a note of dignity is given by the size of the moldings and general scale of the fireplace. There is a smaller one of similar character in the wig room, having the hood supported on brackets. In the William and Mary period the angle chimneypieces with stepped shelving above from Hampton Court Palace are an interesting feature, of which one example has already been given. Two others from George II's private chamber and the adjoining room exhibit some simplicity in design, although based upon the principle of the more elaborate type from William III's room.

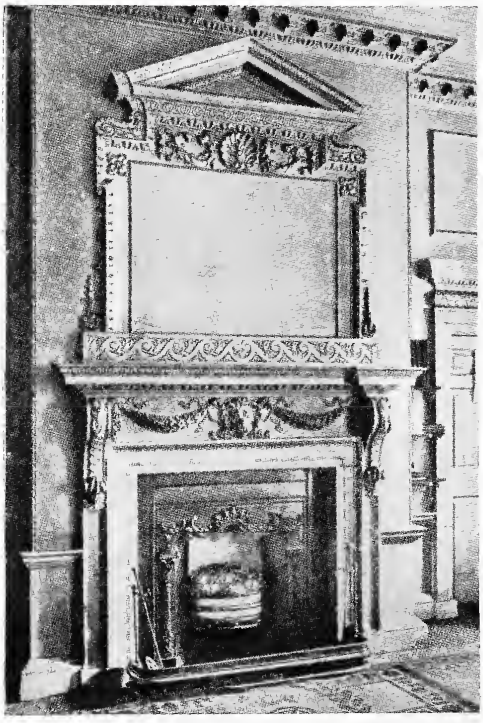
With marble chimneypieces of the mid-eighteenth century the moldings are somewhat heavier and the ornament more florid, of which an example is given in that illustrated from Christchurch Manor, Ipswich. Figures and flowers carved in full relief were a feature of the William Kent and Leoni period, when Rysbrack the sculptor was flourishing. His style was maintained after his employment by James Gibbs.

A room from No. 27 Hatton Garden, Holborn, now in the Victoria and Albert Museum, is of this latter period, the detail of which is of bold character. I hope to give fuller particulars of this fine room when treating of doors, overdoors, etc.

Marble chimneypieces offered less opportunity for carving and were often inlaid or had a certain proportion of carving usually confined to the friezes and consoles or side brackets, any additional ornament required being given in plaster above the overmantel with an enriched cornice, also in plaster, to the room, as at Christchurch Manor, Ipswich, or the back room at Abchurch Lane, the demolished house from which I recently illustrated a ceiling of the Chippendale period. Of this latter period there exists an interesting example of carved mantel at the "Dodo" House, Chichester, known as North Pallant House, where there is also a good type of light eighteenth century staircase, which will be dealt with in its order.

Plaques with classic subjects took the place of overmantels in some of the Adam examples, or were substituted by circular, oval or oblong mirrors. These mirrors had an optical effect upon the proportions of the room and were sometimes, as in the case of the circular Adam type, of convex form. The loftiness of the rooms of the William and Mary period did not obtain in the smaller Adam period examples, except in the larger mansions, as Sion House, Isleworth, and in instances where vaulted ceilings were a feature, as the library at Belton. Thus a circular or oval plaque or mirror over a mantel would have the effect of reducing the apparent height of a room, whereas one of oblong shape of narrow width would have the appearance of heightening an otherwise low room by reason of its tendency to verticality. It is important to note this in dealing with the design of decorations where they are applied to existing rooms. The area being defined, it remains to treat it in a suitable manner, according to the requirements of the owner. A room can be entirely altered as regards the existing proportions by simple means, such as reducing its height by a false ceiling; or, if low, by making it appear higher by the verticality of the paneling; and, in the case of a mean chimney breast, by widening the same and centralizing the mantel; or, if too long a room, giving a reduction by putting an anteroom by means of a

partition, or forming an alcove supported on columns. Where folding doors are a difficulty between two rooms of different width they can be centralized by making the folding doors central to the larger room, having one door to open into the adjoining room, the second leaf on that side being converted with the paneling into a jib door. These are a few of the expedients resorted to where difficulties present themselves unwelcomely to the designer. In the case of billiard



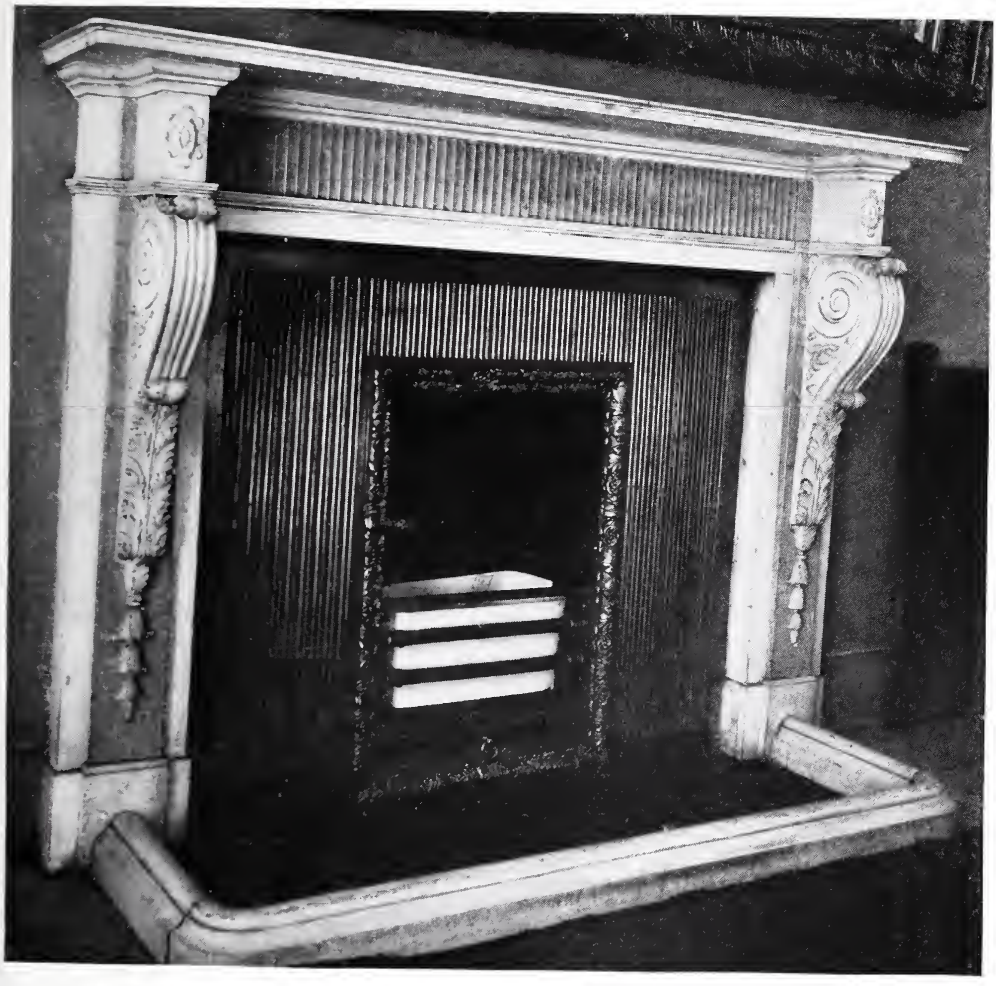
CHIMNEYPIECE IN A HOUSE IN WHITEHALL GARDENS, LONDON. ABOUT 1727.

rooms that are hardly large enough for a full-sized table in width, it may be possible to change the fireplace to the end or the angle of the room, always avoiding large-section dado rails, as these become awkward at the angles of the chimney-breasts owing to their increased projection at the mitre.

Where it is desired to increase the size of a room involving the addition of one on the half-landing, it may be necessary to alter the staircase; but the mere leveling of the floor sometimes suffices with the removal of the side door and frame, and forming a bressummer or arch over the portion of wall of the larger room where removed for access.

The Pink Drawing Room at Clayton House, Bucks, contains a carved mantel with a large amount of ornament over, leaving a space for a picture or mirror. The room is lofty and the style of the ornament is what is known as the Chinese-Chippendale, or the type which was developed in England following the era of Louis XV in France and the publication of Sir William Chambers' Chinese designs. The mirrors of this time were very elaborate examples of carving, in which conventional birds were embodied in the design with ornament more in representation of grottos than anything formerly adopted. In this connection I hasten to expose a fallacy which is given by some writers on furniture, that the ornament in the form of a "C" indicates the work of Chippendale. An examination of late Wren work will reveal a similar motif, especially at Hampton Court Palace, but the style was fully developed by the mid-eighteenth century and was practiced in sculpture by H. Cheere and others. It is an interesting study to trace the origin of detail. The Greek honeysuckle can be found in a crude form in early Abyssinian ornament; the Georgian husk went through many vicissitudes before it took the form now familiar to students of decoration; and many of the *paterae* can be traced back to medieval days, when they formed the diaper of church walling or were carved on oak beams.

After drawing some hundreds of enriched moldings in many different periods, I have reason to endorse Solomon's maxim that there is "nothing new under the sun" in the detail of decoration, each apparent invention having its particular heredity and antecedents. It is therefore necessary to treat anecdotes of the description referred to with due reserve. Indeed, I doubt if half the work attributed to Chippendale was of his responsibility, and the same may be said with regard to work attributed to Grinling Gibbons or Inigo Jones. It is merely

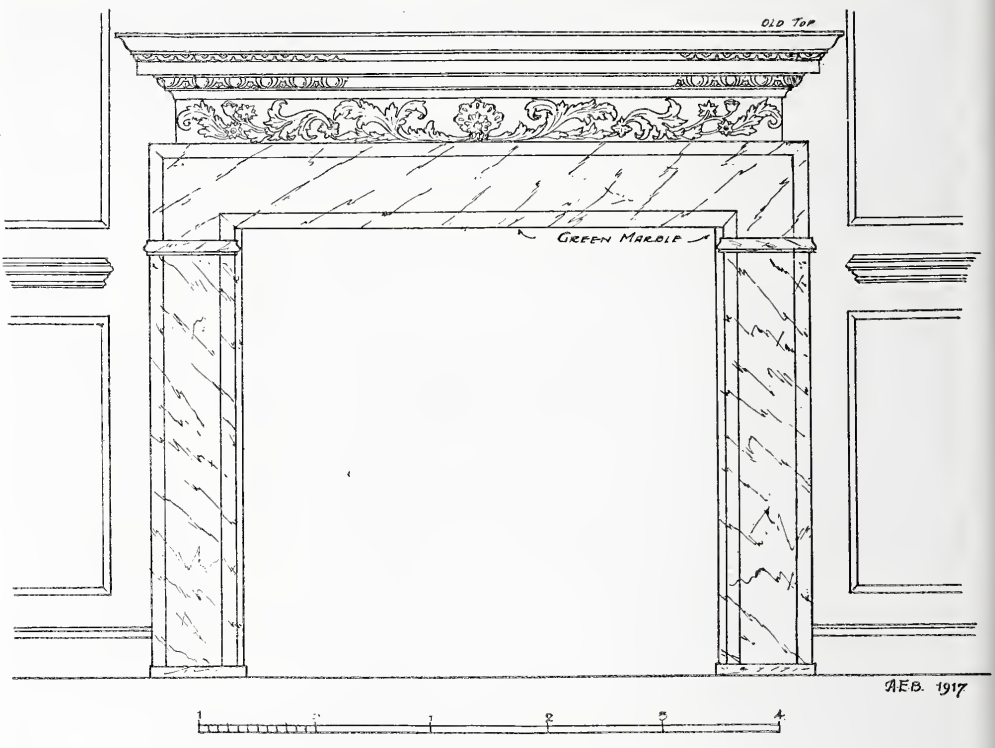


CHIMNEYPIECE IN HALL, ROYAL COLLEGE OF SURGEONS, FROM OLD WAR OFFICE. PROBABLY BY WILLIAM KENT.

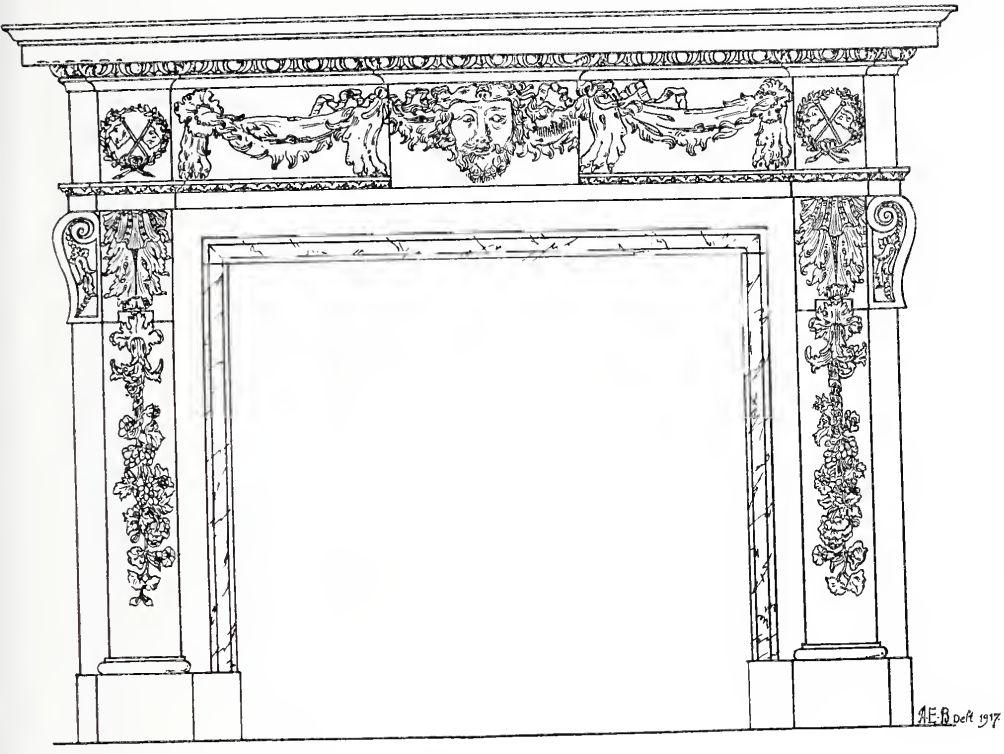
for want of a better allocation that work which exhibits ornament similar to that carved on authentic Chippendale furniture has been attributed to him by certain writers, and by others as being of the era when he flourished.

The cornice and frieze from an old example is occasionally to be found adapted to a new marble architrave, which has probably occurred in the case of the mantel illustrated here from the Sparrow House, Ipswich. This ancient house, with its half-timbered work and bay windows having ornamental external plaster work, is a favorite object with writers dealing with Elizabethan domestic architecture. It is in fact the show place of Ipswich, but has suffered internally from the attentions of an overzealous owner, who has from time to time added certain old work and modern plaster work from various periods, which must puzzle the uninitiated not a little. There are ceilings of quasi Chippendale-cum-Louis XV construction, and a staircase having balusters dating from early Adam days. The chimneypiece, above referred to, is in a room with concave ceiling ornamented with large Tudor roses in plaster at intervals.

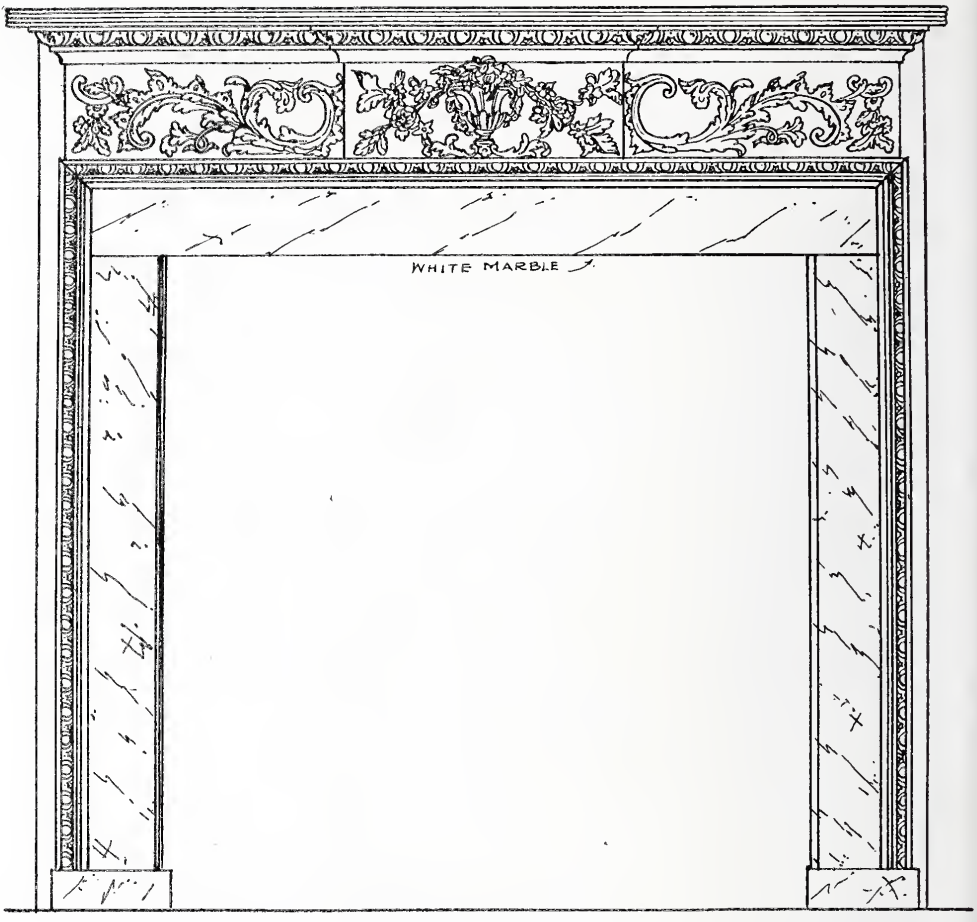
Wren's House, Chichester, is all of one period, with fine wrought iron entrance



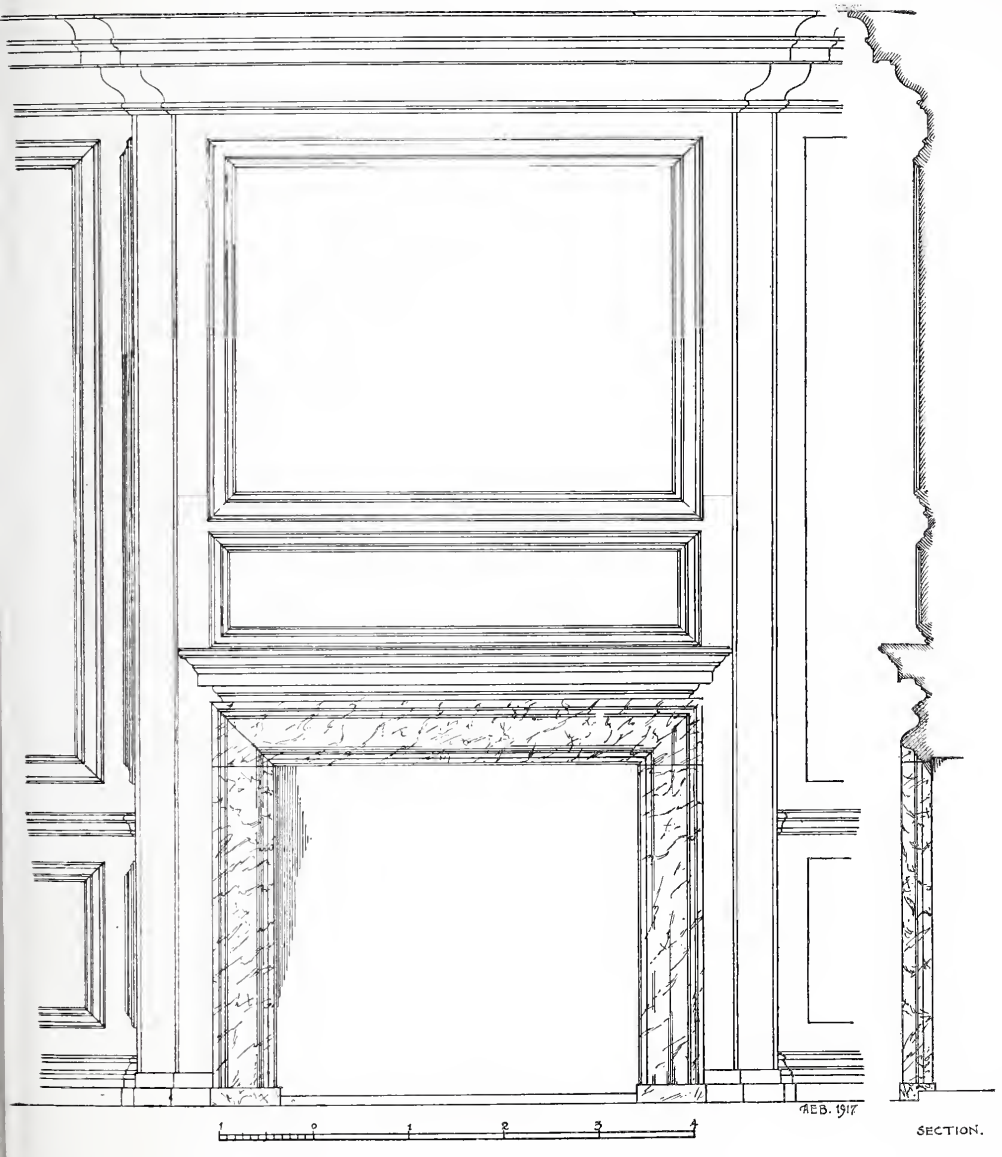
MANTEL FROM THE "SPARROW HOUSE," IPSWICH.



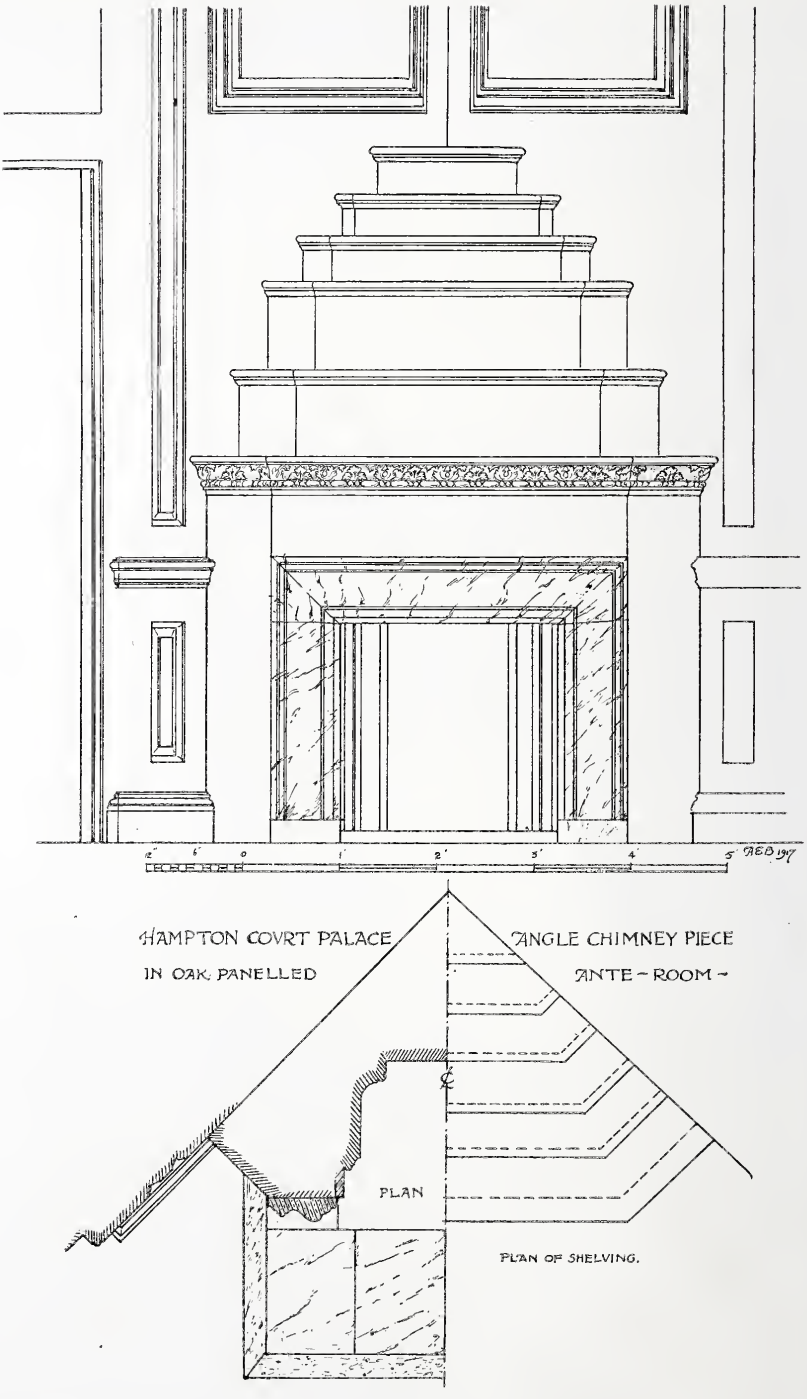
MANTEL FROM THE QUEEN'S HOUSE, GREENWICH.



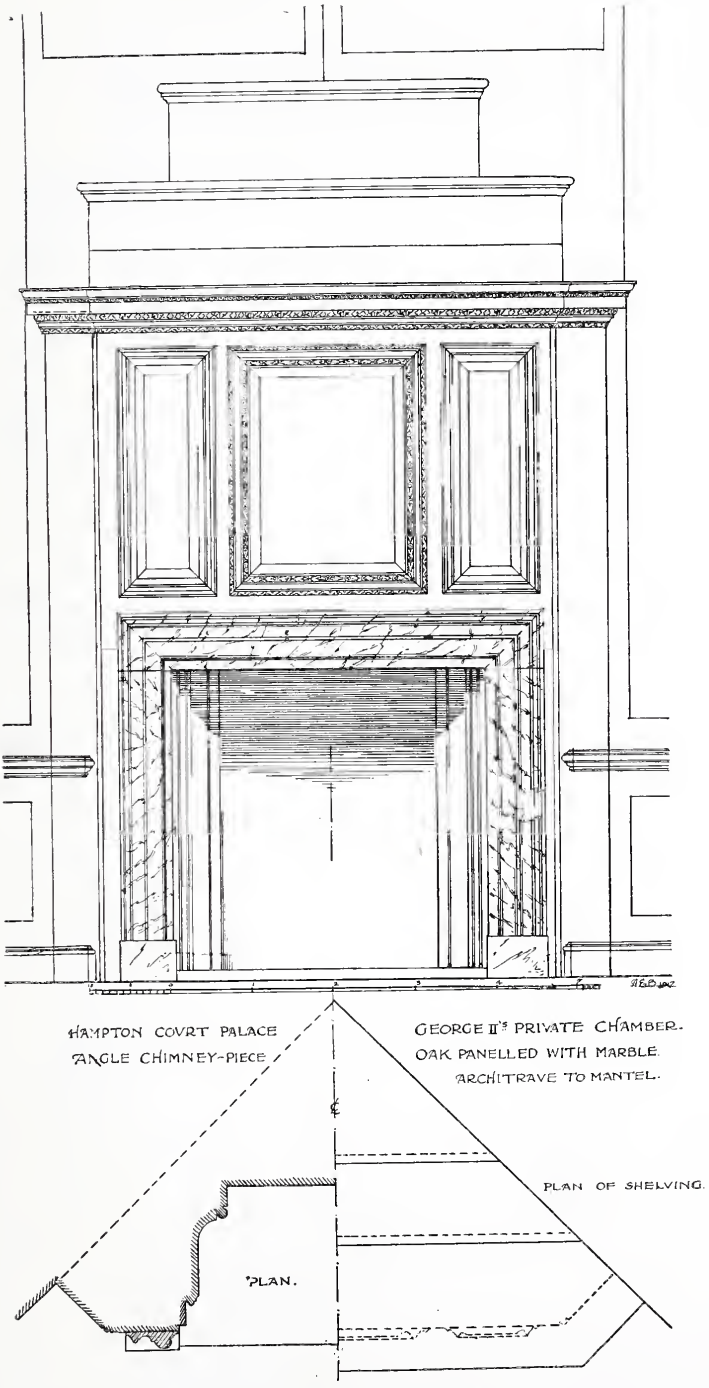
MANTEL FROM NORTH PALLANT HOUSE, CHICHESTER.



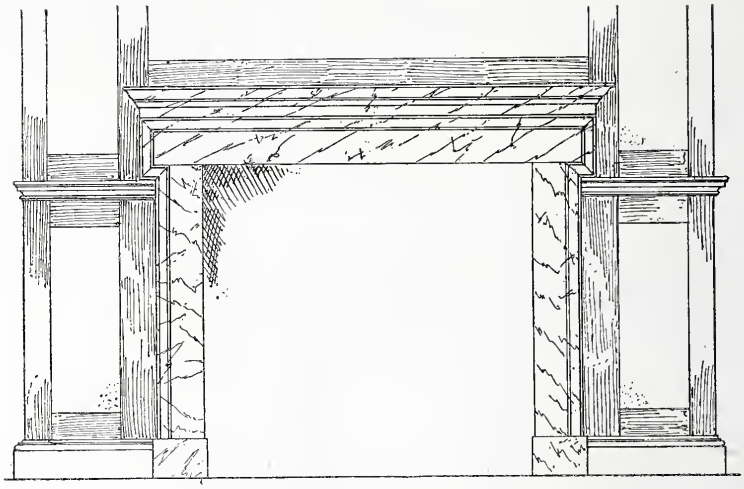
CHIMNEYPIECE FROM "WREN'S HOUSE," CHICHESTER.



ANGLE CHIMNEYPIECE IN ANTE-ROOM AT HAMPTON COURT PALACE.

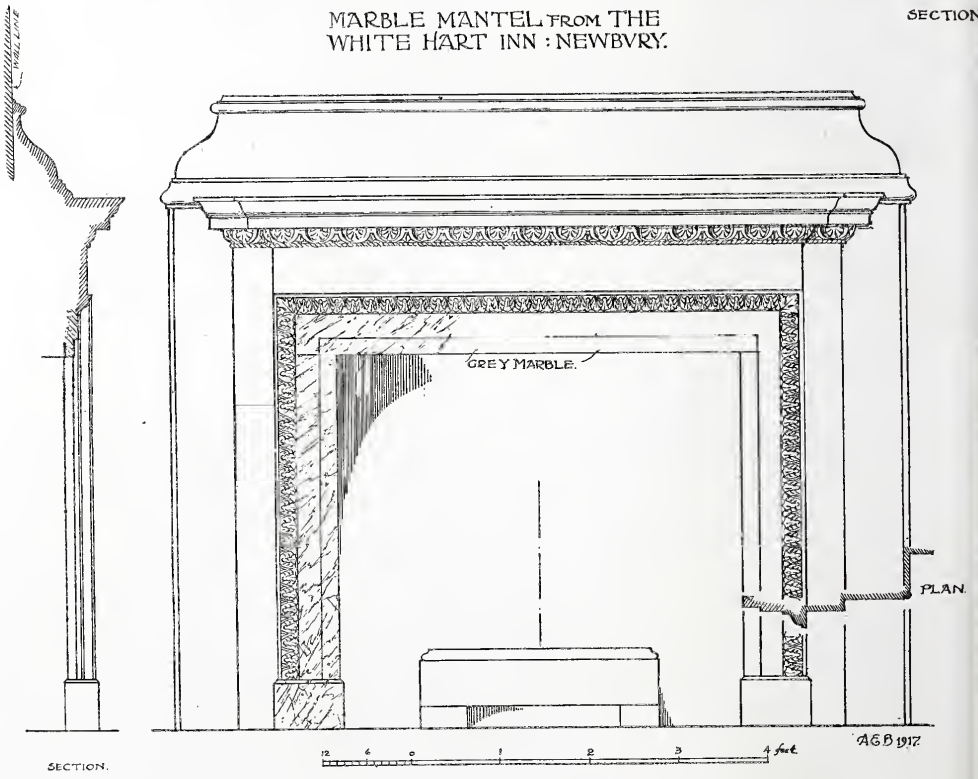


ANGLE CHIMNEYPIECE IN GEORGE II.'S PRIVATE CHAMBER, HAMPTON COURT PALACE.

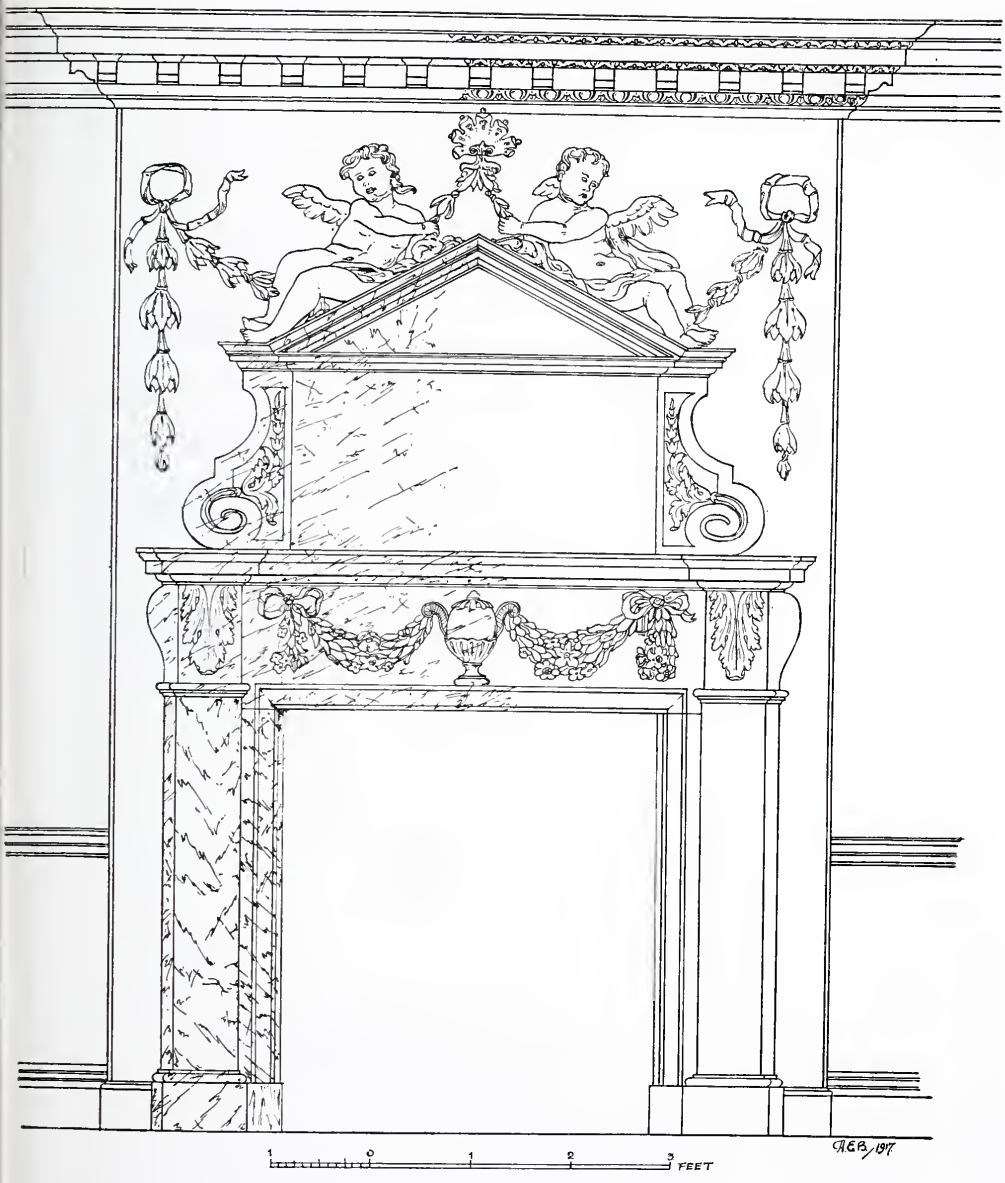


SECTION

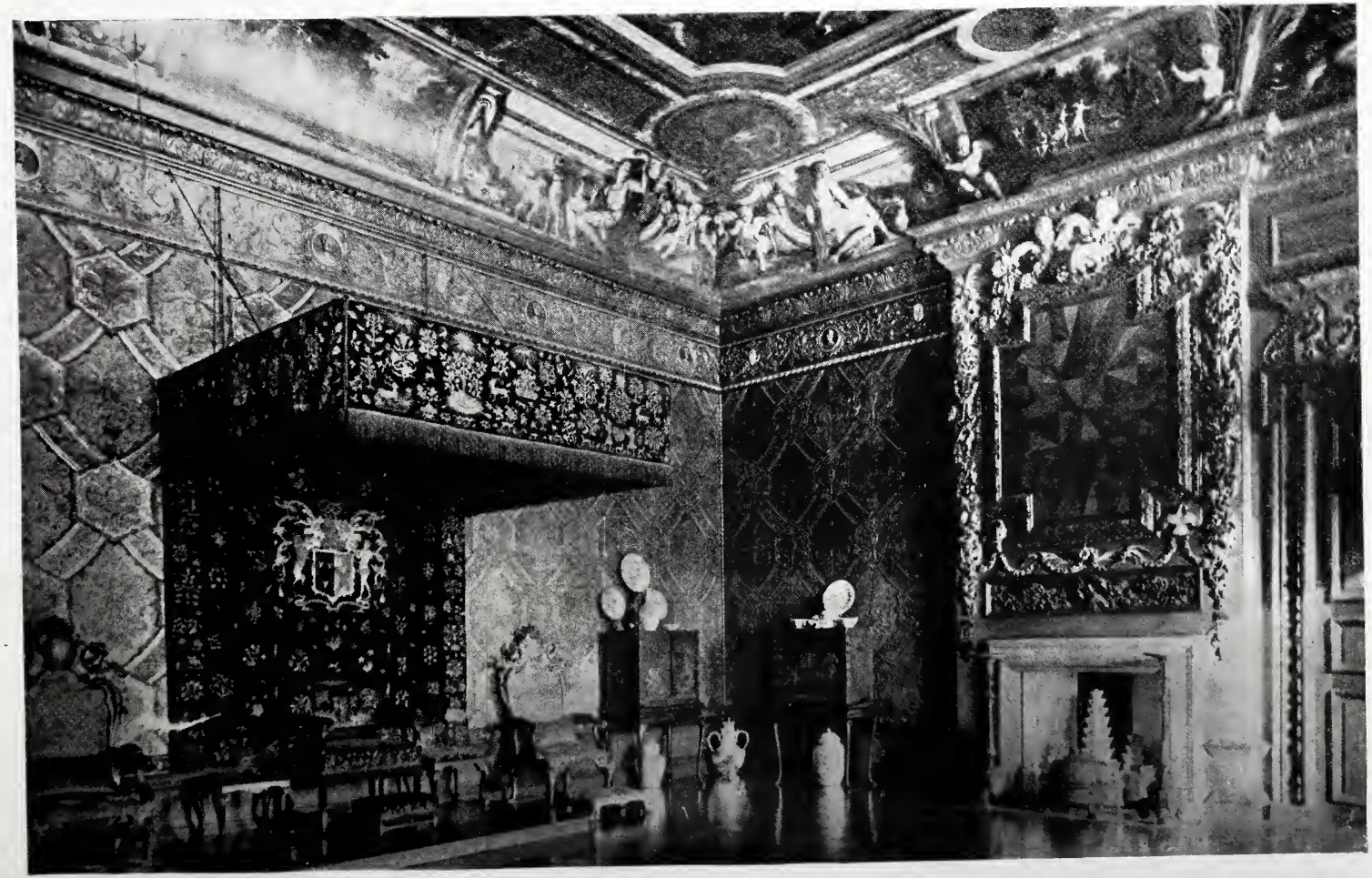
MARBLE MANTEL FROM THE
WHITE HART INN : NEWBURY.



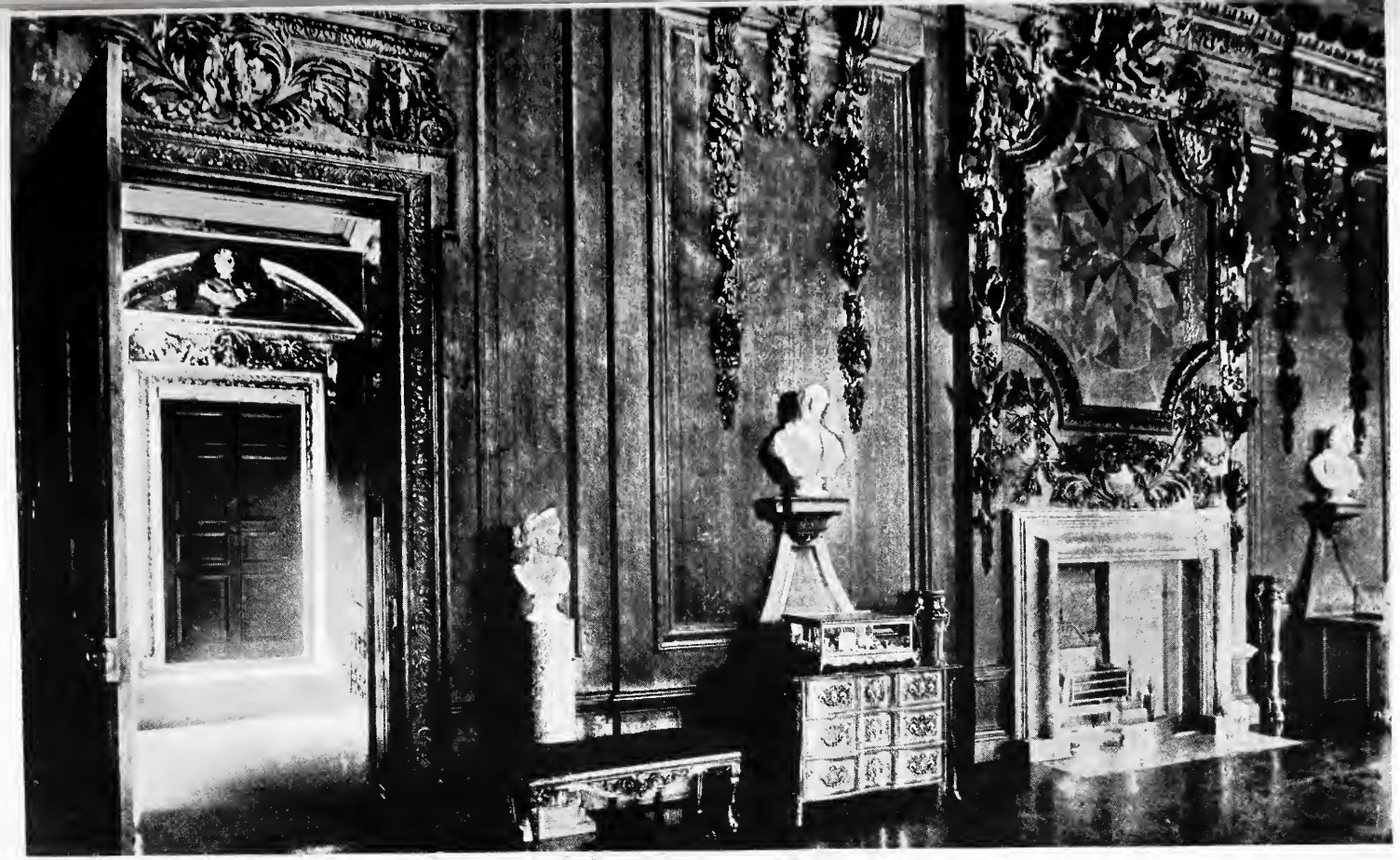
CHIMNEYPIECE FROM SALOON AT
ASHBURNHAM HOUSE, WESTMINSTER.



MARBLE CHIMNEYPIECE AT CHRISTCHURCH MANOR, IPSWICH.



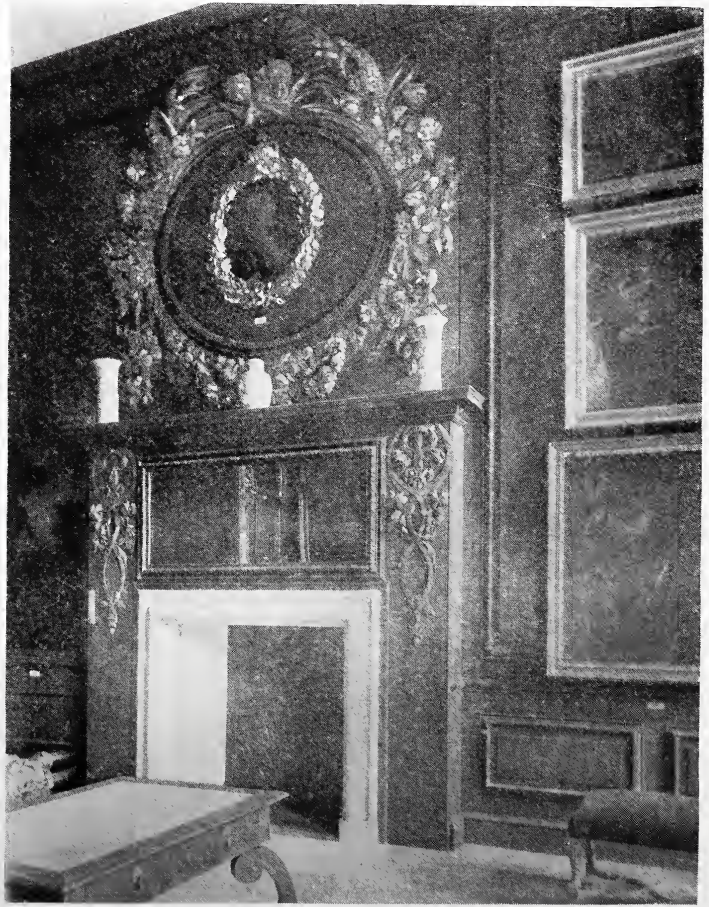
CHATSWORTH, PRESENCE CHAMBER — RESIDENCE OF DUKE OF DEVONSHIRE, DERBYSHIRE.



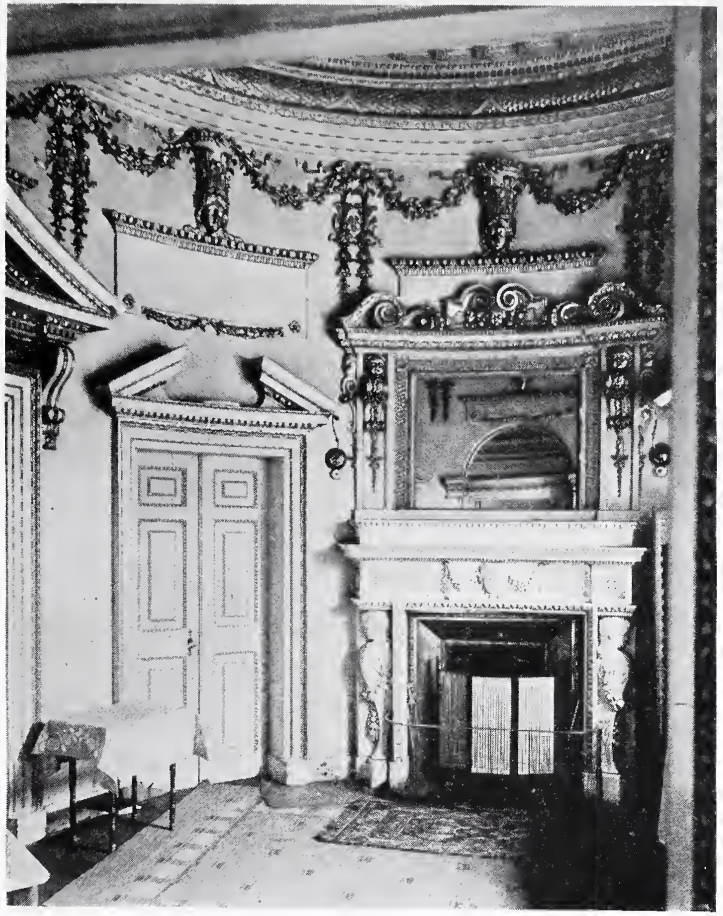
FIRST STATE ROOM, CHATSWORTH—RESIDENCE OF DUKE OF DEVONSHIRE, SHOWING CHIMNEYPIECE WITH INLAID ORNAMENTAL PANEL.



CHIMNEYPIECE—PRESIDENT OF BOARD OF TRADE ROOM, PEMBROKE HOUSE, WHITEHALL. BY WILLIAM KENT, 1740.



CARVED CHIMNEYPIECE, BY GRINLING GIBBONS, IN HAMPTON COURT PALACE.



FIREPLACE AND MANTELPIECE IN EARL OF BURLINGTON'S RESIDENCE, CHISWICK. BY WILLIAM KENT, 1729.



CEILING IN EARL OF BURLINGTON'S RESIDENCE, CHISWICK. BY WILLIAM KENT, 1729.



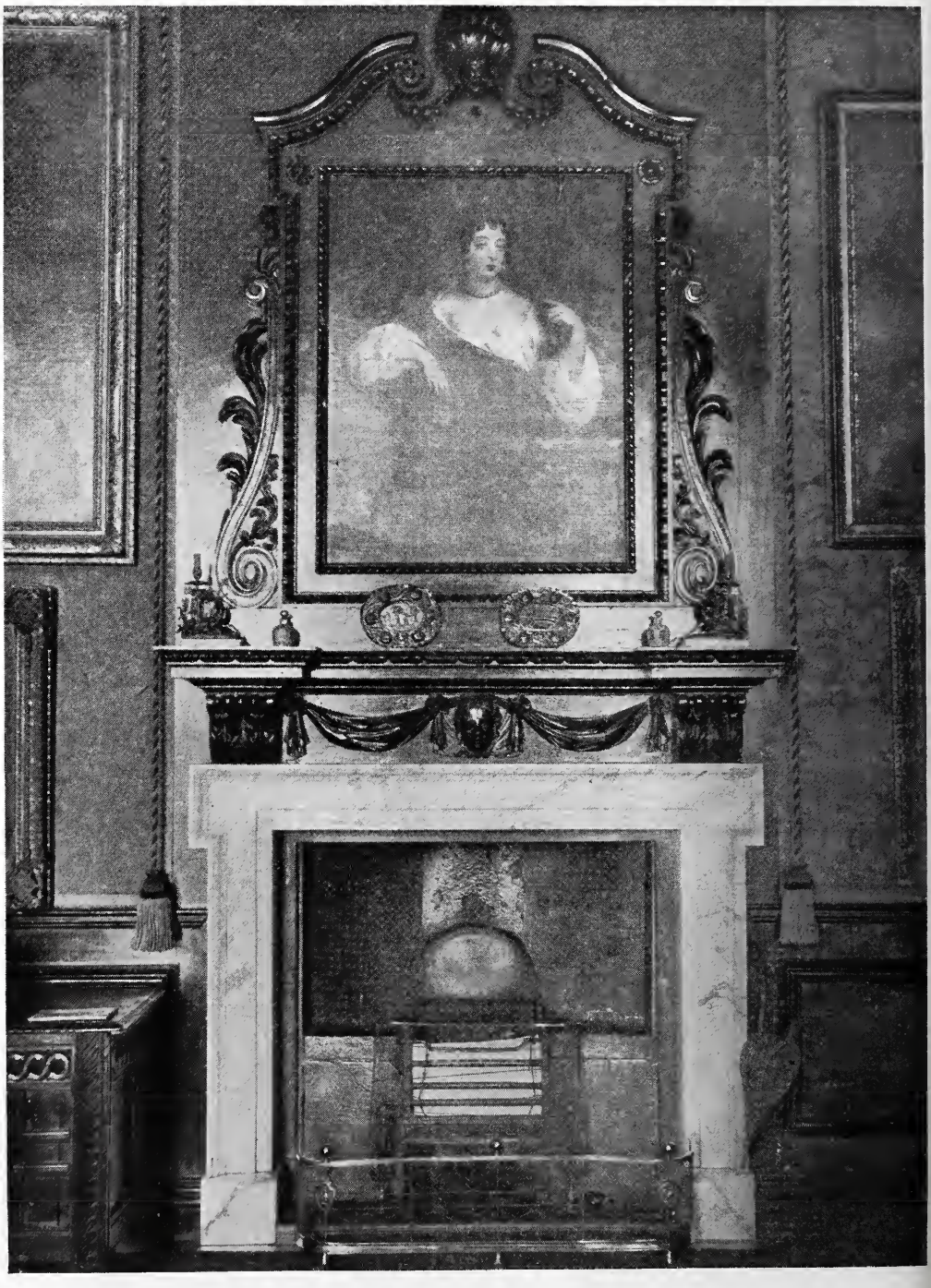
ORIGINAL PLASTER MODEL BY ALFRED STEVENS FOR A MARBLE MANTELPIECE ERECTED IN DORCHESTER HOUSE, PARK LANE, LONDON.



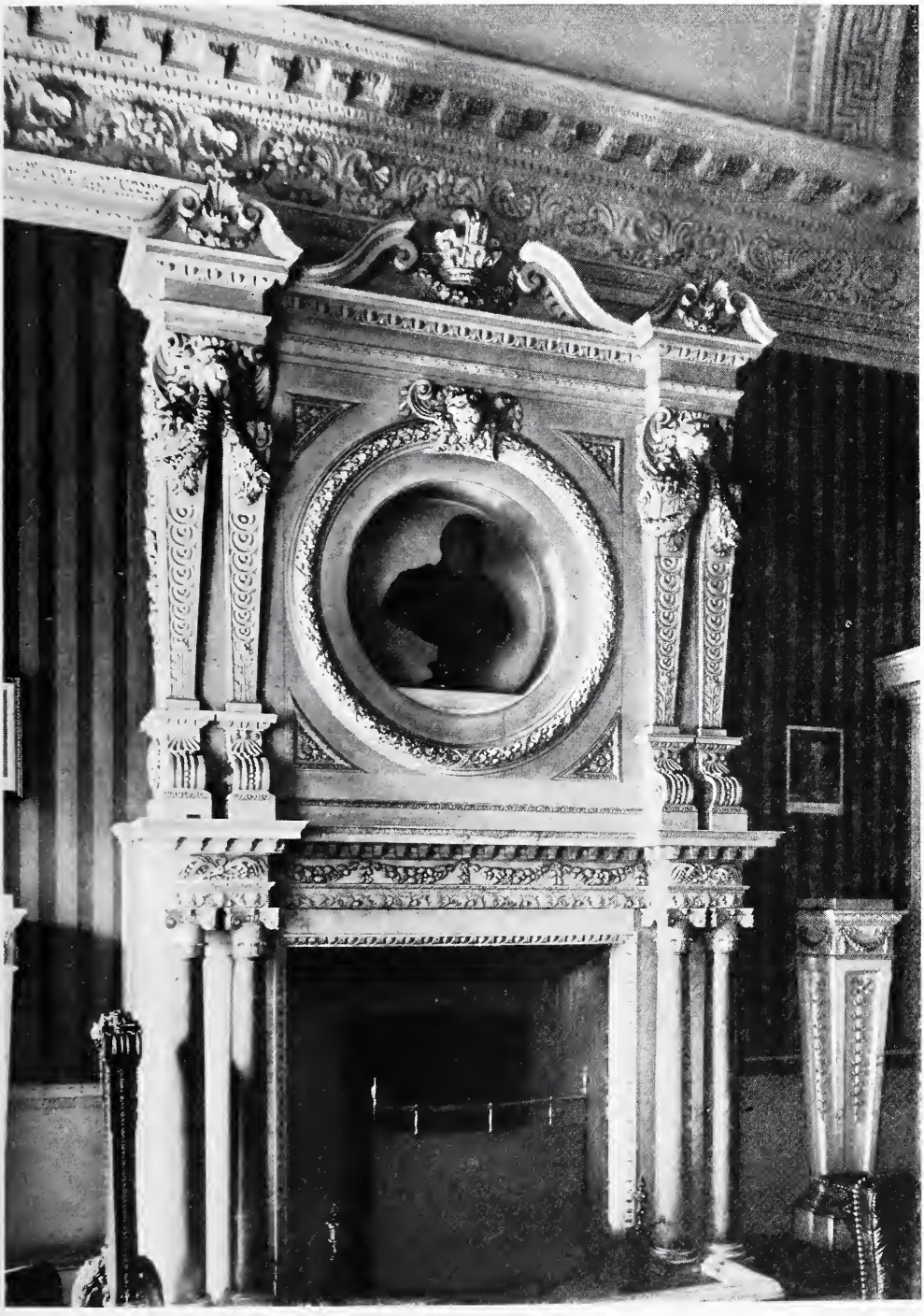
JACOBEAN CHIMNEYPIECE, KIDDERMINSTER LIBRARY, ATTACHED TO LANGLEY CHURCH, BUCKS.



CEILING IN QUEEN'S PRIVATE CHAPEL, HAMPTON COURT PALACE.



CHIMNEYPIECE, BRYMPTON D'EVERCY, RESIDENCE OF THE LATE SIR PONSONBY FANE, SOMERSET.



LIBRARY FIREPLACE—TRAVELERS' CLUB, PALL MALL, LONDON. BY SIR CLARKE BARRY.

gates having bold bolection molded paneling within and thin doors with rim locks, etc. The chimneypiece given from one of the upper floors has a very bold eight-inch marble architrave to the surround for the interior.

Regarding interiors, grates, etc., it should be observed that up to the end of the seventeenth century the open fire chiefly obtained, with cast iron backs of varied design, which accounts for many instances where a want of harmony exists between the mantel and interior of today. Hob grates, dog grates and other fitments followed in quick succession in the eighteenth century, and the fine steel grates of Adam design are among the most interesting examples of the smith's art. One of the oldest existing companies supplying these features is the Colebrookdale Company, and later the Carron Iron Company.

The mantel from the Queen's House, Greenwich, is a fine instance of mid-eighteenth century design, for which Ripley was probably responsible, as he was much employed here in an architectural capacity during the first half of the century. The design exhibits taste and skill in execution and is one of the best features of this classic edifice, which emanated from the mind of Inigo Jones.

The principle here adopted anticipated work developed during the time when Sir William Chambers built Carrington House, now demolished. One of the chimneypieces from this building is now housed in the woodwork section of the Victoria and Albert Museum, being carved in pinewood of a rather more classic design and consequently with less freedom than the example from Greenwich.

In order to leave room for the necessarily increased number of illustrations this article demands, the description must be somewhat curtailed. I shall hope to give certain examples of mirrors, overmantels, etc., in the next issue.

[The earlier papers in Mr. Bullock's series appeared as follows: Part I, February, 1917; Part II, March, 1917; Part III, April, 1917; Part IV, February, 1918; Part V, April, 1918; Part VI, May, 1918; Part VII, June, 1918; Part VIII, July, 1918; Part IX-a, September, 1918.

As, owing to transatlantic mail conditions, proofs of these earlier papers were not submitted to Mr. Bullock, a number of typographical errors escaped unchallenged, which he now enables us to correct.

On page 125, line 14, February, 1917, read Holkham Hall instead of Holkam Hall; on page 211, line 43, March, 1917, read Bolsover instead of Balsover; on page 229, line 6, same issue, read John Crunden instead of John Crundler; on page 325, line 29, April, 1917, read Sir R. Rowand Anderson instead of Sir Rowland Anderson; on page 332, line 52, same issue, read Dyvoet of Mechlin instead of Byvoet of Mechlin; on page 335, line 22, same issue, read Marsden instead of Marsten; on page 174, line 16, February, 1918, read carved instead of curved; on page 337, lines 9 and 17, April, 1918, read John Webb instead of Philip Webb; on page 428, May, 1918, the ceiling of the Banqueting House, Whitehall, attributed to Streater, is by Rubens, although Streater may have repaired it for Sir Christopher Wren; on page 544, June, 1918, read Ceiling in Lady Holt's Drawing Room instead of Lady Hoyt's; on page 546, line 22, same issue, read Brothers Adam instead of Brothers Adams; on page 41, July, 1918, read Westminster instead of Westminister.—Editor.]



THE JADE FENCE

A Unique Illuminated Garden Feature as an Accessory to the Pan American Buildings at Washington, D. C.

By Grace Norton Rosé

White marble, gleaming in the evening light, set close with dark shrubs and trees, a pale straight pool reflecting the coming of night, and level bits of lawn and sunken gardens holding in their shadowy depths queer aboriginal forms and strange blue gods—this, edged about by the white rail of a marvellous fence that in the dimness shows faintly the tracery of its pierced reptilian design, will make the grounds of the Pan American buildings in Washington, D. C., uniquely beautiful at the close of day.

Wonderful as they are then, when form is more than color, it is only as the stars come out and the shadows deepen that they may be shown in all their radiance and weird unreal beauty. The wand that transforms them is the push of an electric button.

Of a sudden the night is swept aside, and color and light glow at you from this darkening space. Color, but such color! —the color of the precious jade: dim, milky, translucent, varying, shot with the unearthly light that floods up from the phosphorescent bottom of the water caves of the Yucatan. The spirit of the Zenotes is in its mystery and its charm. Along all the strange fence it creeps, touching the variants of blue, fused now with emerald green, and now with creamy amethyst. It is the art of the snake worshippers, executed in the choicest stone of the Mayas, a fence whose panels are seemingly literally of jade; the chalky green that is more nearly blue, the cloudy blue that is not quite green, in which both colors merge and in whose depths lies the light of an amethyst, the milkiness of sea water beaten to foam, the satiny gleam of a robin's egg shell, and the clear, cool green of the under side of a curving wave.

In the dark surface of the still pool a wonderful purple reflection is thrown by the light under the arches of the Pavilion annex. It is apparent that green light flowing over blue tiles, shadowed by the archways, helps create this lovely effect. The eye will follow the strange and beautiful fence and rest on the terminals and bits of groined sculpture. Whence comes their radiance? Green light again, concealed and indirect, glinting down over undulating tracery, falling over the eery faces of graven gods and gleaming through their eyes, like emeralds set in jade. It is the subtle lighting that accents so wondrously this exotic fairyland, this outdoor museum of aboriginal American art.

The garden in winter has been carefully considered. Against a background of gleaming snow and purple shadows, the blue panels set in milky marble cannot fail to be both charming and unusual.

It was in the Zenotes, the water caves of the Yucatan; swimming in those strange pools, lighted only by that unearthly effulgence glimmering up through the clear water from the phosphorescent bottom, fifteen feet below, and the flickering gleam of a candle set high on a rocky ledge, that there came to Albert Kelsey, F. A. I. A., his inspiration for the embellishment and enrichment of the Pan American garden.

When, to his deep regret, his association with Professor Cret came to an end



VIEW OF THE PAN-AMERICAN ANNEX AND GARDEN

ALBERT KELSEY & PAUL P. CRET

ASSOCIATE ARCHITECTS



"From a groove under the marble rail, concealed green lights will cast a soft, eery radience down through the blue tracery"

Model of one of the fifty-four panels of the

JADE FENCE

The Pan-American Garden, Washington, D.C.

JOSEPH BASS, *Sculptor* ALBERT KELSEY, *Architect* J.H. DULLES ALLEN, *Potter*



The LONG NOSED GOD



The FEATHERED JAGUAR

TWO MOTIFS *for the* JADE FENCE

PAN-AMERICAN GARDEN, WASHINGTON, D.C.

Albert Kelsey, Architect

"Lights concealed beneath the head-dress will throw a green glow down around the face of the figure. As in the intervening panels of the marble fence, this composition will be executed in jade-colored hand made terra cotta."



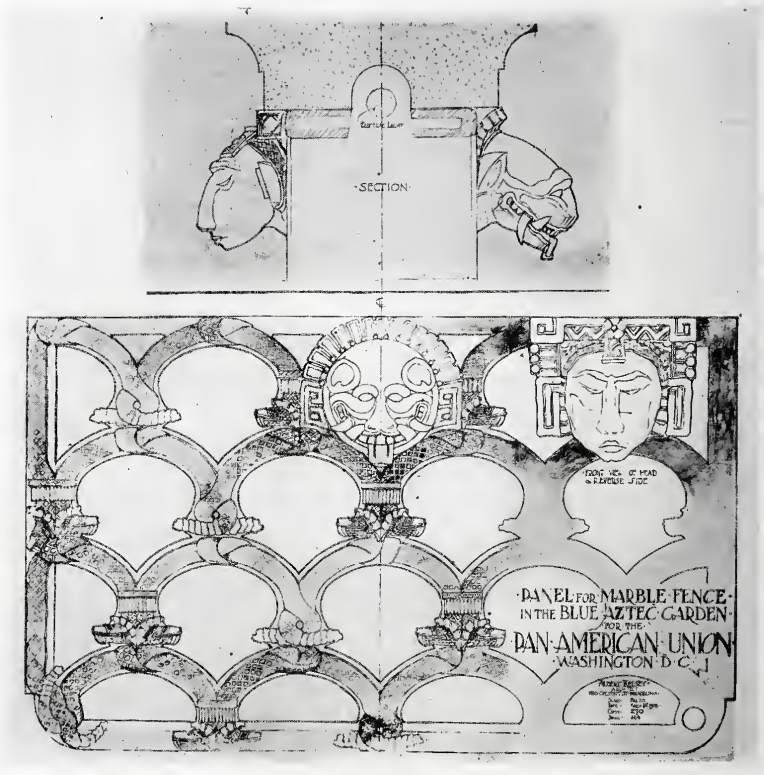
DESIGN *for* ONE OF A PAIR *of* TERMINAL FEATURES *for the* JADE FENCE

Albert Kelsey, Architect

six or seven years ago, he was appointed permanent architect for the Pan American buildings and grounds to carry on a consistent scheme in architecture, planting, furnishing and redecorating. Five years ago after submitting a design for the Jade Fence and securing its approval from the Director General, he made the trip to Yucatan in quest of ideas and local color, and returned full of enthusiasm for the architecture and sculpture of the Mayas.

"The first finished samples of these modern adaptions were made in turquoise blue with an antique finish, but later specimens have the blue slightly fused with emerald and ameythyst, and are high-lighted with just a suggestion of reddish gold, making them quite unique as objects of ceramic art. Both Mr. Bass, the sculptor, and Mr. Allen, the potter, have entered into the spirit of this unusual undertaking with the utmost enthusiasm," says Mr. Kelsey in speaking of the jade-colored, hand-made, terra cotta, in which his compositions are executed.

The five acres surrounding the buildings are intended to form an international oasis in the National Capitol. Already, all official receptions tendered the envoys sent over by the Allies were given either in the Pan American building or in its lovely garden.



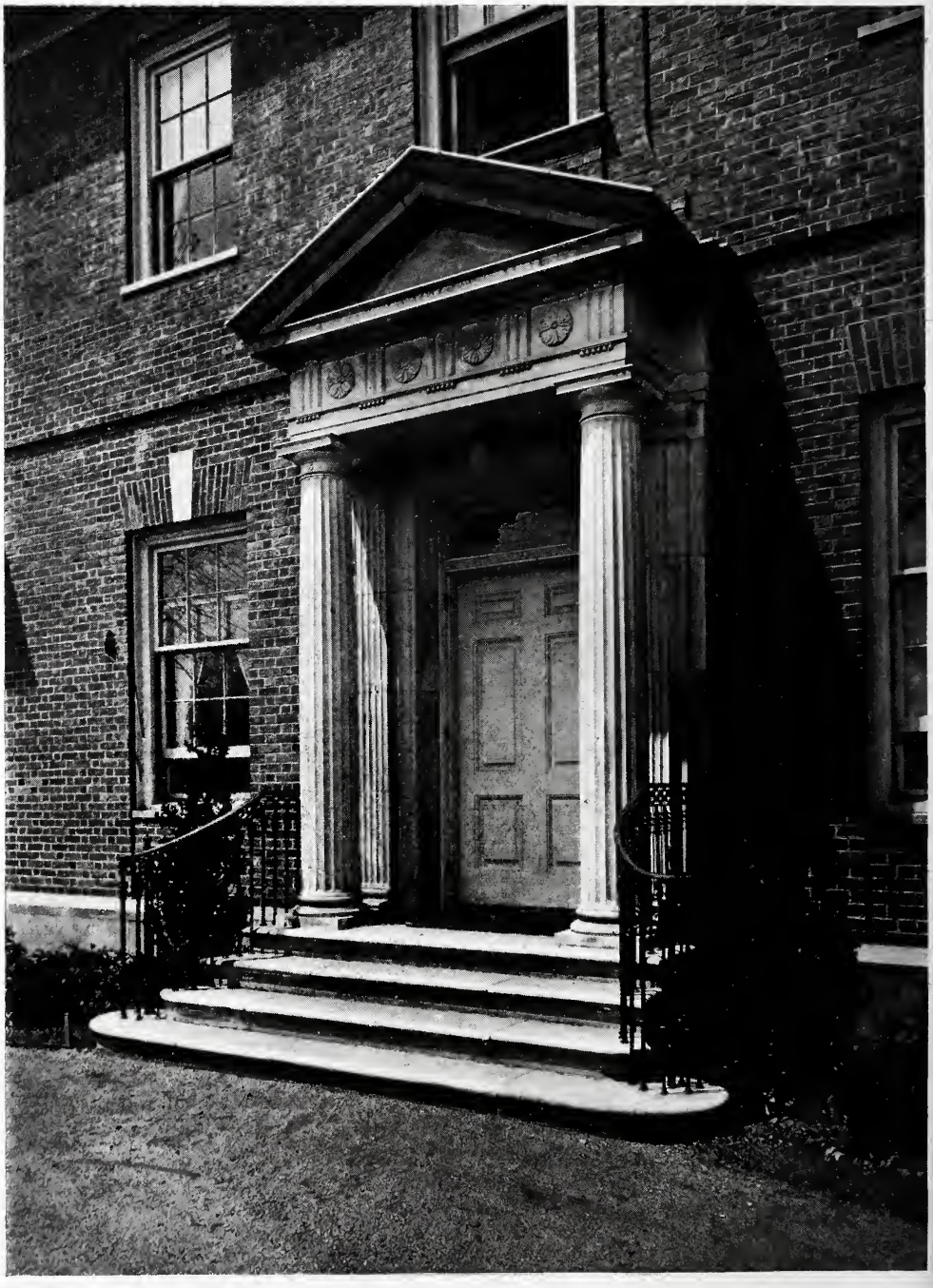
The JADE FENCE

DRAWINGS SHOWING STUDIES FOR FIRST TWO HEADS, THE CONSTRUCTION AND METHOD OF ILLUMINATION

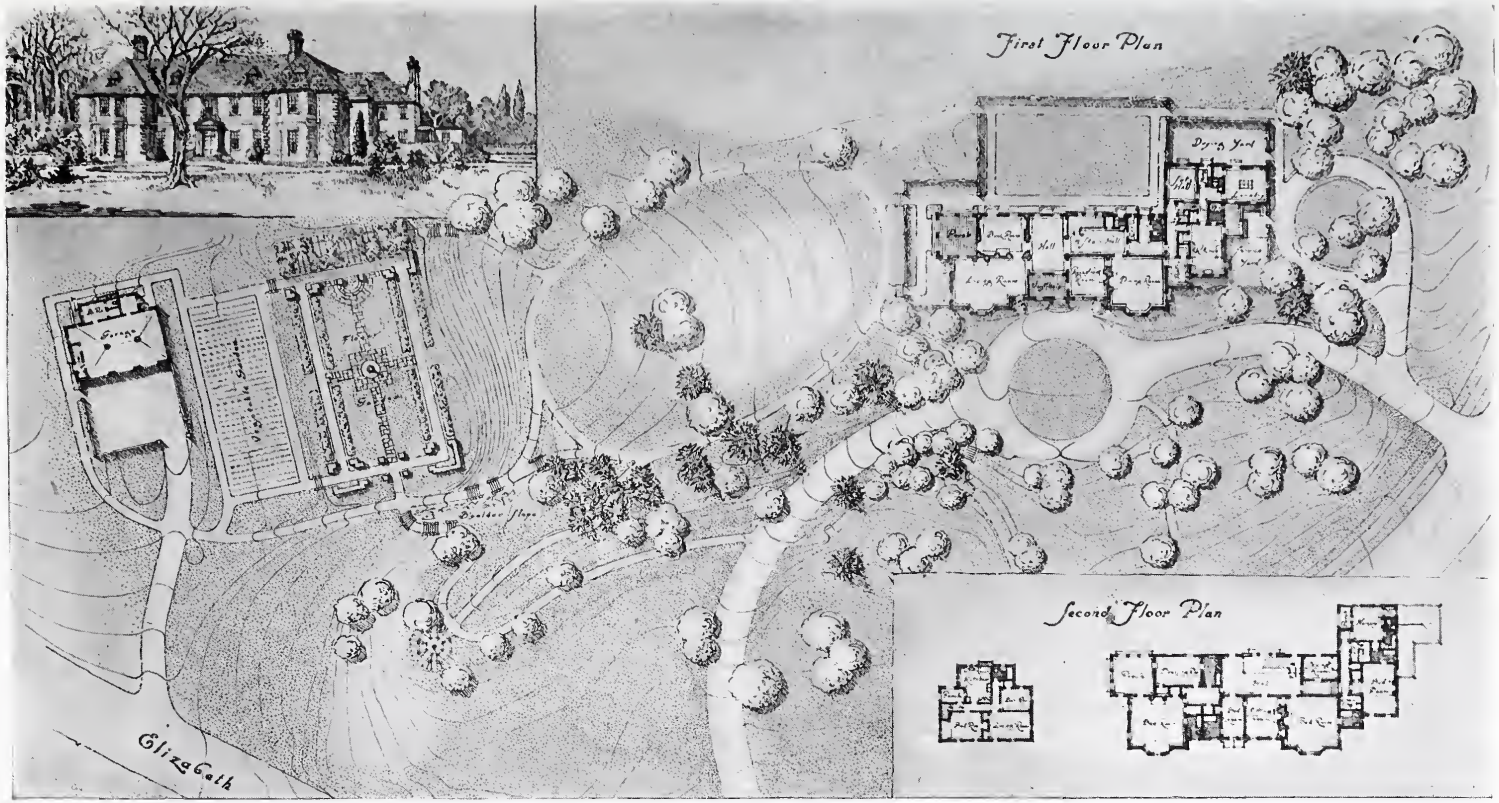
PORTFOLIO OF CVRRENT ARCHITECTVRE



RESIDENCE AT HARTFORD, CONN. GOODWIN, BULLARD & WOOLSEY, ARCHITECTS.



RESIDENCE AT HARTFORD, CONN. GOODWIN, BULLARD & WOOLSEY, ARCHITECTS.



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RESIDENCE AT HARTFORD, CONN. GOODWIN, BULLARD & WOOLSEY, ARCHITECTS.



RESIDENCE OF THOMAS NEWBOLD, ESQ., NEW YORK. McKIM, MEAD & WHITE, ARCHITECTS.



RESIDENCE OF THOMAS NEWBOLD, ESQ., NEW YORK. McKIM, MEAD & WHITE, ARCHITECTS.



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RESIDENCE OF THOMAS NEWBOLD, ESQ., NEW YORK. McKIM, MEAD & WHITE, ARCHITECTS.



APARTMENT OF ALFRED C. BOSSOM, ARCHITECT, NEW YORK.



APARTMENT OF ALFRED C. BOSSOM, ARCHITECT, NEW YORK.



APARTMENT OF ALFRED C. BOSSOM, ARCHITECT, NEW YORK.



SEA WALL AND BALUSTRADE—ESTATE OF LIEUTENANT ARTHUR H. MARKS, MARBLEHEAD, MASS. ANDREWS, RANTOUL & JONES, ARCHITECTS.



SEA WALL AND BALUSTRADE—ESTATE OF LIEUTENANT ARTHUR H. MARKS, MARBLEHEAD, MASS. ANDREWS, RANTOUL & JONES, ARCHITECTS.

WORKINGMEN'S HOUSES IN ITALY



By Alfredo Melani

PART I

THE industrial housing problem has for many years been under consideration in Italy, where, indeed, it is a serious one, involving the necessity of almost entirely replacing or reconstructing the older tenements that prevail in our cities, especially the big industrial centres, and above all the city of Milan. However, I do not wish to imply that Italy was the first country to consider the problem; because France, whose oldest popular (i. e. workingmen's) houses were first erected at Moulhouse in 1835, long preceded us; and England too, under the leadership of Lord Shaftesbury, became interested in the housing problem as far back as 1841.

The movement for better housing started in Italy in 1903 with the Luzzati Law; and although much has been accomplished since then, much remains to be done, for our cities, big and small alike, are still clamoring for a solution of the problem of properly housing the less fortunate classes.

The war, in addition to having imposed so many other hardships on our population, has greatly intensified the housing problem, because of the congestion of population, coupled with decline of building, in many rural districts as well as in certain industrial centres.

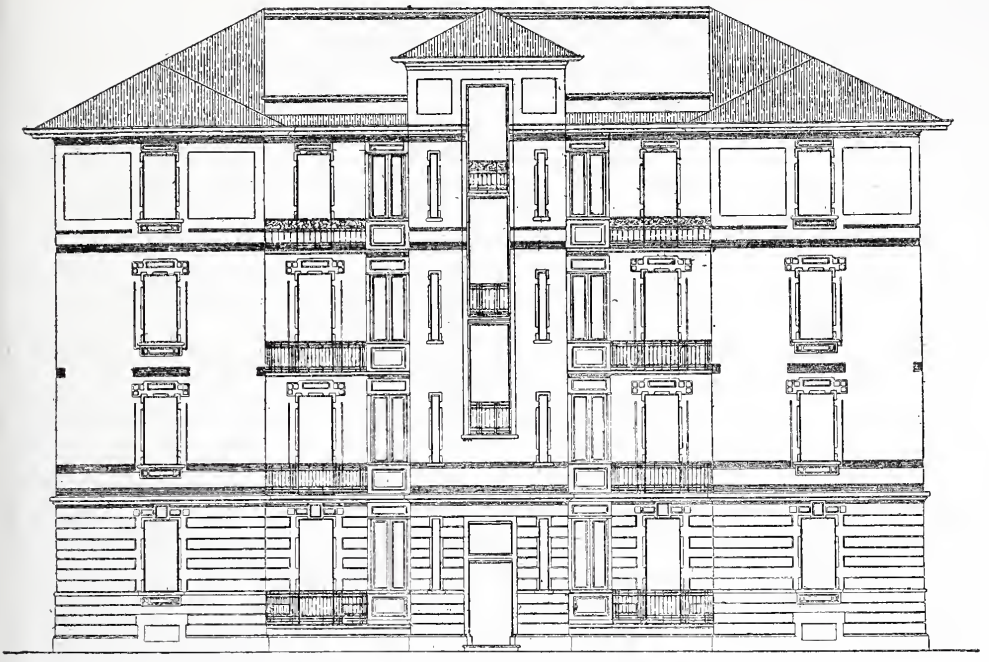
The Government's aid is necessary, because private enterprise cannot bear the burden that pertains to the education, the health and the welfare of tenants. Private enterprise cannot promote a deep interest in the study of the technical side of the problem, by offering prizes and developing ideas that tend to facilitate its solution, so well as the Government can. The workingman's home must be a means of educating the people in proper living. It must be a school, and it will be such if the technical, social and economic phases of the problem are attacked as a combined unit; and those who can best help towards combining these phases are the Government and the local authorities.

Such was the intention of our Government when, years ago, it undertook to wipe out the slums of Naples by voting 100 million lire, mostly for the construction of workingmen's homes, although the results did not come up to expectations.

In the same way, later, the Government intervened when Venice attacked the housing problem with a view to purifying some of its slums. The interest of the government then was due to the fact that Venice, the Queen of the Adriatic, should preserve its local color.

I do not mention at length the reconstruction in the central part of the city of Florence, because it was not intended as a workingmen's housing measure. The district of Florence that lies between St. Maria del Fiore and the Strozzi Palace was occupied by squalid houses which sheltered a class of criminals. These houses were demolished and replaced by pretentious buildings, including homes for people of wealth. Later, however, Florence took up the problem of providing workingmen's homes.

Rome also became interested in the



A HOUSE IN THE VIA SOLARI SECTION, MILAN.

movement, and in 1911 the Committee for the Commemoration of Italian Independence opened a contest on the subject of "The Modern Home," offering prizes for the best suggestions for homes for employes of small income and common laborers.*

Milan, crowded with factories and industrial establishments in a manner that no other city in Italy surpasses, not even Genoa with its great maritime trade, is conspicuous as a leader of the movement for better workingmen's houses. Milan, which piles up private and public enterprises beyond all expectations, solves and renews the housing problem. The "Moral Capital," as Milan is often called, shelters institutions and societies that are the most prominent in Italy. The "Umanitaria" was founded there, and the "Ente Autonoma" or Self-Governing Institution, whose social and building activities are of the utmost importance, has its seat there. Milan is also the headquarters of the Italian Touring Club with its 170,000 members, whose activities embrace some of an architectural nature; and it is the home of the Co-operative Union, a society acclaimed all over Italy, which has constructed near the metropolis a small garden city reserved for people of small means. Besides, Milan has incorporated in its Building Department, which regulates the building activities of the city, a Bureau for Popular (i. e. workingmen's) Homes, and has assigned a special commission to look after the development of this public service.

Turin also has interested itself in the problem, as is evidenced particularly by the dwellings erected by the "Opera di San Paolo."

A National Law, comprising all previous regulations, was compiled (Feb. 27, 1908, No. 89) and approved by a Royal Degree (No. 89), published in the Official Gazette No. 80, April 4, 1908. To this law was added a complicated Regulation, executive in nature (approved by

*I must not forget to mention the law unanimously approved a few years ago by both Houses of our Parliament on the "Provisions for Rome." It aimed to eliminate the subtenancy evil and the excessive speculation in building plots wherever there was urgent need for modern houses. It also undertook to provide a means to check the rapidly increasing rentals by substituting a system of installment payments.

Royal Degree No. 528, published in the Official Gazette No. 222, Sept. 23, 1908).

The Law of 1908 deals first with building funds, that is, with provisions regarding loans to co-operative and benevolent societies or other institutions for the purpose of building workingmen's houses. All banks for savings or otherwise, all provident loan societies and all legally recognized credit institutions are allowed to finance such houses, charging interest at the rate of not more than 4 per cent. The amount of the loan is not to exceed two-thirds of the ascertained value of the buildings if the loans are not protected by life insurance policies, and is not to exceed seven-tenths of the value if so protected. These provisions have worked out well.

The interest rate of 4 per cent is rather high, but it represents the maximum; the "Umanitaria" was satisfied with 3½ per cent.

Our legislators wanted a guarantee binding on tenants and buyers, and they therefore authorized all Public administrations to hold back, from the salary of any of their employes who bought or rented homes built by societies or institutions, the amount of the rent or of the installment due if the societies or institutions so requested.

The Law also makes the following fiscal concessions: it reduces to one-fourth the registration taxes on every document pertaining to the charters of building societies; it reduces likewise the mortgage and registration taxes incident to the selling and renting of the houses, and it exempts the buildings from all governmental, provincial and municipal taxes for a period of ten years. These concessions naturally cease if the houses are used for a purpose different from that which the law stipulates.

Workingmen's houses, in rural districts as well as in cities, are considered by the law, and it therefore authorizes loans to be contracted for the building of rural dwellings and it also exempts them from taxes and makes many other concessions in their favor. It divides the rural houses into two classes: those erected by the communes or municipalities, and those erected by private benevolent institutions or societies. Where there are no building societies, the communes are authorized to build the houses. The building societies are allowed to issue bonds up to a certain limit and the communes are permitted to sell to them building plots at cost price.

Other essential provisions are that workingmen's homes cannot be rented to families whose total income is more than 1,500 lire or 300 lire for each member of the family—this refers to the houses built by municipalities. In the same way these houses cannot be rented to persons who own buildings on which are levied government taxes amounting to more than twenty lire a year. The regulation is not uniform, a very complicated affair, as I said before; it defines the character of workingmen's houses, controls their sale and transfer, provides for a Central Committee within the Ministry of Industry and Commerce, determines the limits of the Government's supervision, and explains many other things.

The regulation also fixes the maximum amount of rent to be charged for each room as follows:

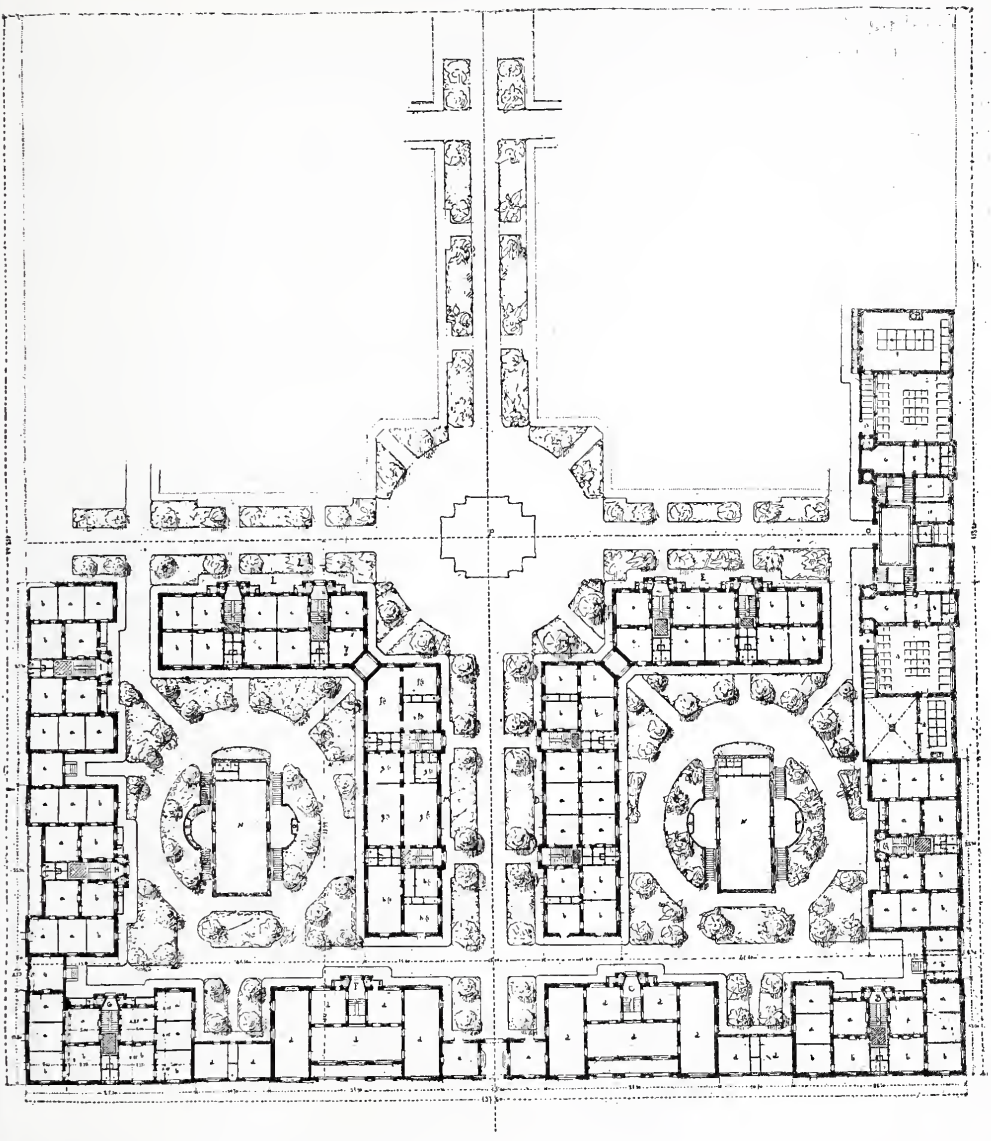
96 lire in communes with a population less than 50,000.

120 lire in communes with a population between 50,000 and 100,000.

163 lire in communes with a population of more than 100,000.

This does not apply to houses detached or otherwise which may have a small flower or truck garden and which are for one family only. The maximum rent for such houses is one-fifth more than the rates set forth above.

Taken altogether the law is very fair. Of course, there is room for improvement; and I do not claim that the law of 1908 is perfect, but with us it is a good starting point. In the days to come improvement will naturally be made. In fact, at a convention held in Milan in 1910, a Cabinet Minister announced important new provisions. And in June of the same year a bill entitled "Provisions for Workingmen's Houses, to facilitate their Construction and the Transfer of other Properties and Buildings in-



PLAN OF HOUSING DEVELOPMENT IN VIA SOLARI, MILAN, BY THE UMANITARIA SOCIETY.

The letter a indicates a three-room apartment; b, a two-room apartment; c, a one-room apartment; d, stores; e, porter's lodge; f, g, h, rooms for day nursery, kindergarten and lecture room.

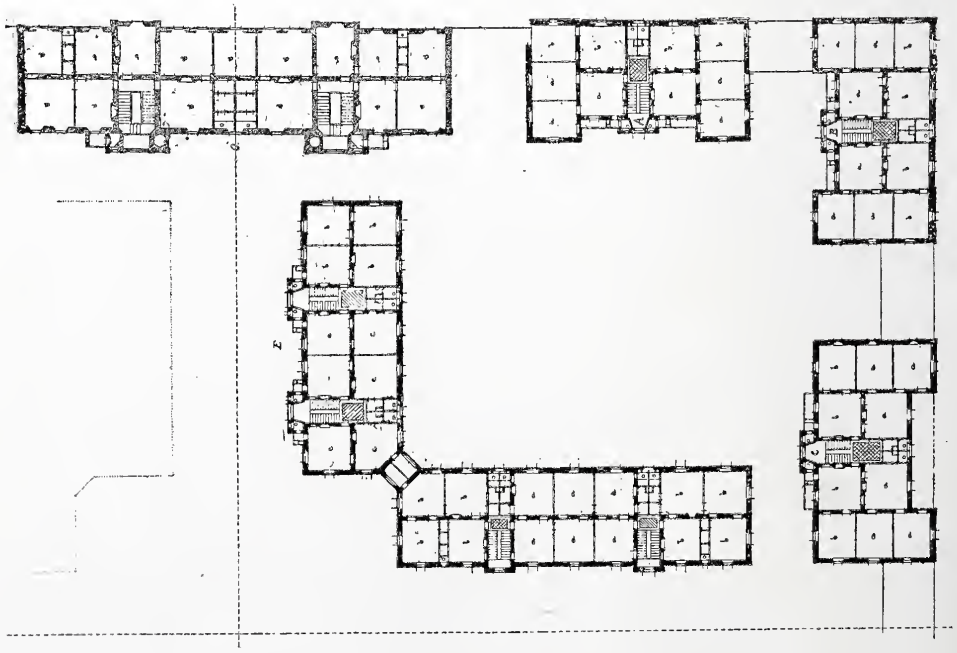
to Dwellings," was introduced in the Chamber of Deputies. This project is a step forward and touches two of the most important points: the sources of credit and the fiscal exemptions. Without changing the provisions of the Law of 1908, it authorizes all public benevolent institutions to invest their funds in the popular (i. e. workingmen's) homes up to one-fifth of their resources. It also authorizes the "Workingmen's Sickness and Old Age Pension Fund" to invest up to one-fourth of its resources in the same houses. This means that the fund can lend up to twenty-five million lire instead of the six authorized by the Law of 1908. The interest on the mortgages described in the Law of 1908 is exempt from all income taxes.

All the foregoing provisions are to facilitate credit. The fiscal exemptions are as follows: the period of tax exemption on houses is increased to fifteen years and, in addition to the provisions stipulated in the older law, all revenue and registration taxes on all deeds relating to houses are reduced to one-fourth. Another notable concession is the exemption of non-popular houses from the building tax and surtax for a period of four to ten years, reckoned from the day of occupancy.

All this tends to show that Italy is anxious to solve, as best she can, the housing problem for the less fortunate classes. If the results so far achieved have not been very remarkable, especially as to numbers, we must trust to the future.

The Government, before the war, had fifty-four million lire available for this new activity; and it is safe to say that the 245 and more building societies actually operating in Italy had a like sum invested, either from their own resources or from borrowed funds.

The law encourages initiative by benevolent societies; but before considering what they have accomplished, I will briefly mention some of the experiments undertaken by private individuals in Italy. Therefore, as a matter of history, I will relate that of Mrs. Carlotta Celesia, of Milan. She, a woman of noble sentiments, became interested in the industrial housing problem and



SECOND FLOOR PLAN OF GROUP OF WORKINGMEN'S HOUSES IN VIA SOLARI, MILAN.

tried to find a solution; but the result was discouraging.

It is difficult to determine whether this failure, which was much discussed in Italy, was due to technical causes, such as bad arrangement of rooms, defective operation, improper supervision, particularly bad tenants, or other reasons. Something must surely have been wrong, because later housing enterprises, particularly those of the "Umanitaria," have been notably successful. As regards the treatment of property by tenants, the "Umanitaria" reports that ninety out of one hundred tenants take good care of their homes and not a few surround them with such loving care as to merit the praise of visitors (see "L'Umanitaria," 1907, page 12).

The "Umanitaria" is a benevolent society, the most important in Italy. In 1892 G. M. Lauria bequeathed his entire fortune of ten million lire (increased to thirteen million by interest accumulations) "to aid all unfortunates to rehabilitate themselves." Among the many miseries that we have to contend with in this world the "Umanitaria" chooses to mitigate those which, independent of natural causes, affect men who, if aided, have the capacity to overcome them.

The founder believed that the way to save unfortunates from the depressing effect of long days of idleness through lack of work and the humiliation of begging for alms was to find occupations for them so that they could become self-supporting and at the same time help them in upholding their self-respect and dignity.*

The society provides work for the unemployed through its Home for the Unemployed, and maintains Trade Schools. Furthermore, it aims to assist every workingman to obtain an attractive, well-built home. For this reason the "Umanitaria" became interested in the housing problem and attacked it from every angle, from the construction of the walls to the furnishings of each apartment; and it has done so well that whoever wants to study the housing problem in Italy must turn to the society founded by B. M. Lauria, although, strictly speaking, it is not a building society like the "Ente Autonomo," of Milan, the leading institution of its kind in Italy, with eighteen million lire set aside for the provision of workingmen's houses. This institution, indeed, has taken over the building activities of the "Umanitaria" which preceded it.

The housing problem, therefore, must be considered from three different points of view; technical (architectural and constructional), economic and social; and the "Umanitaria" can give us points on each of these three different aspects.

The "Umanitaria" has been able, notwithstanding the high cost of dwellings when decently constructed, to rent each room at from five to ten lire below the average rental and still realize from them the income it expected. The society, in erecting buildings, did not relinquish the idea of receiving a fair return of its investment.

Taken altogether, the experiments conducted by the "Umanitaria" have given good results; although we must admit that there are some deficiencies yet to be overcome, particularly, the need of an educational propaganda respecting hygiene and thrift on the part of both individuals and communities.

The "Umanitaria" erected its first Workingmen's Quarter in Via Solari, Milan. The inauguration took place ten years ago, and it was made the occasion of a festival. The society through the press expressed the wish that its new tenants (they were about 1,000 people) lead a more happy existence in the spacious, clean and attractive homes. With the wishes went the promise of further developments and the erection of new quarters if an interest of 3½ per cent. could be realized on the investment.

The society decided on an investment of two million lire, a sum that was much less than the needs called for. A

*G. M. Lauria wanted the "Umanitaria" endowed with his estate and with the contributions of its members who, with their modest dues of one lire a year, help in its great work. The members appoint two-thirds of the council; the remaining third is chosen by the Municipal Council. The members also elect an Assembly of Delegates, which looks after the affairs of the society.

larger amount would have been granted were it not for the fact that the various activities of the "Umanitaria" had absorbed the General Fund of the institution. However, the two million was considered sufficient to provide dwellings for 700 families. This was an encouraging start, inasmuch as it was possible to erect schools and other institutions for general education of the workingman with funds obtained outside of the original investment. These extra funds rendered possible the erection of groups of houses with baths, kindergartens and recreation rooms.

The architect, Giovanni Broglio, designed the houses and assumed the direction of the work, associated with Luigi Mazzocchi, engineer, and Luigi Arienti, building foreman.

The "Quarter" is subdivided into squares crossed by walks, and the dwellings on the inside front a spacious court, in the centre of which a pavilion was erected.

The lodgings, of one, two and three rooms, number 240 (half of the total); and each room averages twenty-two square meters, and contains seventy cubic meters of air. The buildings are not planned the same throughout—some have one stairway, others have more than one; all are four stories high (the ground floor 3.80 meters, the other floors 3.60 meters) and the stairways extend from the cellars to the roofs. Each stairway is used by sixteen tenants—four for every floor. The roof is partly gable and partly flat. The gable contains the garrets, which together with the cellars are rented to the tenants; the flat roof is used by the tenants in common, to dry clothes, beat carpets, etc. Each lodging, even those with but one room, have a lavatory, a garbage chute, sinks, running water, gas and balcony, and most of them have a terrace. The stairways and the courtyards are lighted exclusively by electricity. A central heating system was devised and installed; it provides heat for only one room in each apartment, the one most commonly used. Stoves were excluded, because they are apt to be used for cooking and are a source of dirt.

Trees and grassy lawns are abundantly provided; and the exterior of the buildings, although modest, is pleasing. The architectural style is purposely simple. However, the architect showed a modern trend, for, by giving due proportions to the hollow and full spaces, by sobering the mouldings, by contrasting the smooth and rough surfaces, by slightly projecting the roof, and by setting off the walls with colored tiles, he obtained a well-balanced whole.

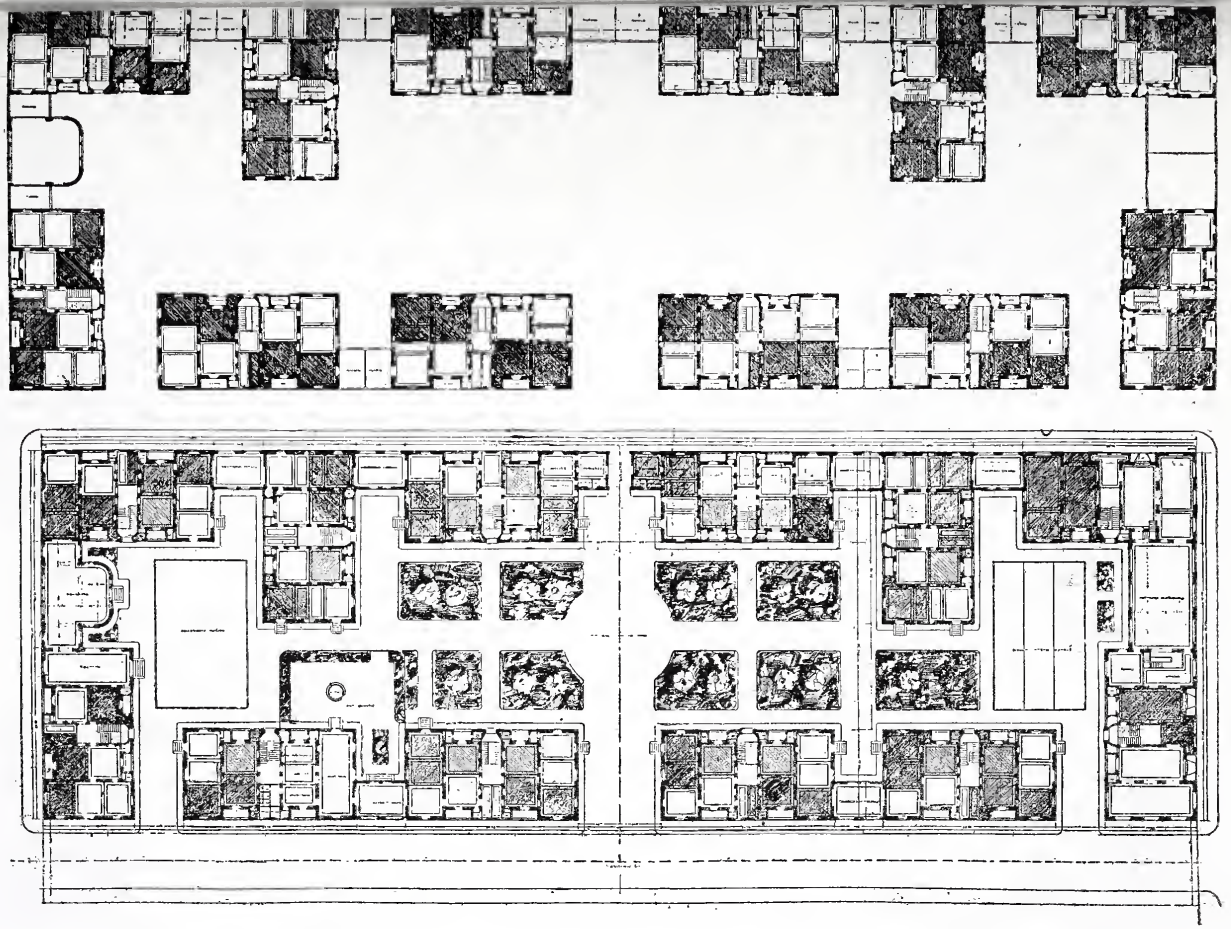
In the quarter of the "Umanitaria" a place was set for a community house, "The House of the People." It contained laundry rooms and workrooms for the women; had special rooms for the use of mothers, to help them in bringing up their children in a proper way, and was provided with baths, showers and hot water. A kitchen was also installed to provide cooked food for bachelors and for families whose women folk were compelled to go out to work in shops. This was a radical innovation in our country.

The spiritual side of the housing problem was not neglected. Library rooms and lecture halls were provided, and also a Children's House, in which modern methods of education are employed for children of the Via Solari Section, three to six years old.

The "Umanitaria," satisfied with the results obtained with this first experiment, followed it with a second. As first planned, the new quarter was to be erected near the first one, on ground already acquired; but on second thought it was decided to move away from Via Solari in order to benefit another part of the city.

In this way the Popular Homes Quarter of the Rottole was erected. The same architect, Giovanni Broglio, was again chosen, and he had the assistance of Maurizio Yung, engineer, and of Giovanni Vescia, builder. The architect, profiting by the experience gained in building the Via Solari Section, made some modifications and improvements, and came much nearer to a realization of the ideal workingman's house.

The new section consists of twelve main buildings: eight of them are three



GROUND FLOOR AND SECOND FLOOR PLAN OF ROTTOLE HOUSING DEVELOPMENT, MILAN, BY THE UMANITARIA SOCIETY.



HOUSES IN THE ROTTOLE SECTION, MILAN.

stories high, the others have four stories, besides the ground floor, which is slightly raised above the street level.

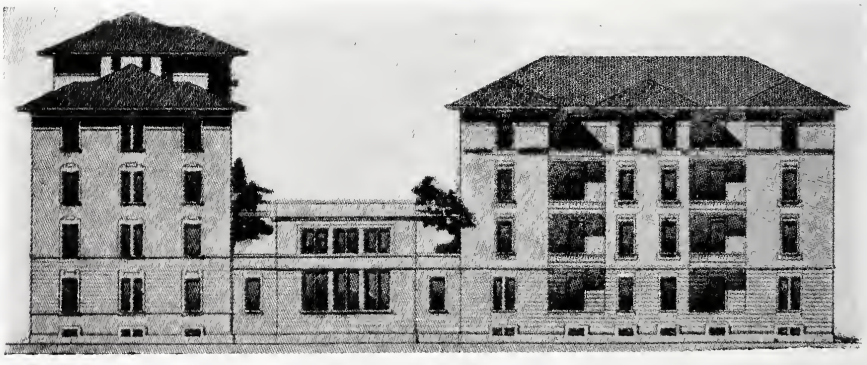
The main buildings are joined by smaller buildings and by terraces that reach up to the second story. With this arrangement the circulation of air in the different lodgings is much improved, and the open spaces between the different buildings afford a much better vista.

The illustrations here reproduced and the observations already made on the Via Solari Section make it unnecessary for me to go further into details. Rather, in order to give an idea of the people occupying this second Quarter of the Rottole, located at one of the extreme ends of Milan, I will classify them according to the occupation of each head of the family. Naturally the tenants are always changing, and the figures I give are those taken when the section was inaugurated.

Metalworkers and Electricians	43
Printers and Lithographers	36
Clerks, Messengers, Letter Carriers	32
Masons, Cementworkers, Varnishers	17
Carpenters, Tailors, Shoemakers	19
Employes of Industrial Establishments	18
Drivers, Street Cleaners, Porters	17
Teachers, Midwives, Miscellaneous	12
	204*

*Two Quarters of the "Umanitaria" give a total of 430 families, or about 2,000 persons.

The 204 families, divided in the way set forth above, are typical of the classes which the "Umanitaria" aims to benefit. As I said before, the "Umanitaria" is not a building society, and it must look after its other numerous social-economic activities; therefore it exacts an interest of 3½ per cent. on its investment. Notwithstanding this, by economizing in all possible ways on the cost of construction, without leaving out any comfort or detracting from the appearance of the buildings, the "Umanitaria" has been able to rent the lodgings at prices much



HOUSES IN THE ROTTOLE SECTION, MILAN.

more reasonable than those prevailing in Milan.

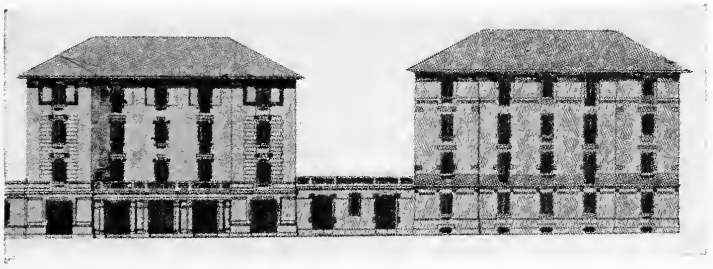
The rent of a full size room of twenty-two square meters was about 120 lire; that of a half-size room, 60 lire; a small kitchen cost from forty to forty-five lire, according to size. The rent for the big terraces was also fixed in proportion to the area.

Altogether, the rent of the different lodgings varies from 120 lire a year to 165, 240, 300, 350 and up to 435 lire. These last are apartments of three full size rooms with a separate kitchen and a large terrace. Since the war started the rents have been advanced somewhat. In normal times the tenants are very prompt in paying. An employe on the premises collects the rents, watches over the tenants, takes care of the apartments, and acts as a general guardian and peace-maker.

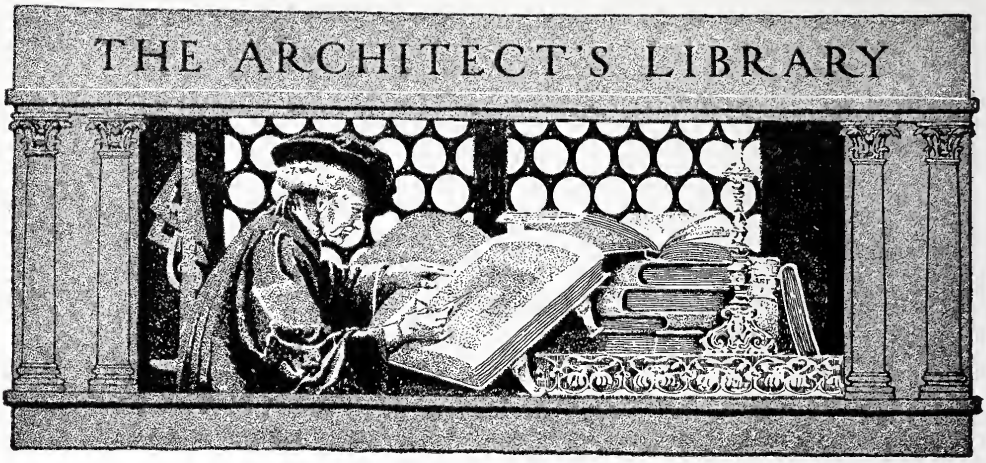
The expenses of keeping an employe on the premises is more than made up by facilitating the collection of rentals and conserving the property.

In the management of the houses, the first section of the "Umanitaria" is assisted by an advisory committee, consisting of five tenants appointed every year by the heads of families and of representatives of interested institutions which ask for the privilege, the privilege being subject to approval by the "Umanitaria." All these representatives form a vigilant group that is useful and efficient. The committee must also help the tenants in all their relations with benevolent institutions, and it must be instrumental in the promotion of thrift and education.

As the "Umanitaria" wanted to leave nothing undone, it opened a prize contest for suggestions as to furnishing the apartments. The winning designs are inspired by a simple, modern style, as if to indicate that a solution of our housing problem cannot be looked for unless we depart from the old traditions that are still firmly rooted in our country. And what I here state reflects my own views as an upholder of modernism in a country still weighed down with tradition and as an educator in the Higher School of Applied Art, which aims to revive the artistic industries of Italy.



HOUSES IN THE ROTTOLE SECTION, MILAN.



WAR BOOKS OF THE CATHEDRALS

By BARR FERREE

Part VII

OF the multitude of books relating to Reims and its cathedral that have appeared since the beginning of the war, which was almost literally the first day of a bombardment that lasted more than four years, Bishop Landrieux's recently published *La Cathédrale de Reims, Un Crime Allemand,* alone attains first rank as an authoritative survey of the dreadful catastrophe. First planned, and partly written in 1915, its publication was wisely postponed to after the end of the war, that the tragic story of the cathedral might be presented in complete form. No one is better qualified for the writing of such a book. Mgr. Landrieux was curé of the cathedral of Reims from 1912 to 1916, becoming bishop of Dijon in the latter year. His great church had long been the object of loving study to him, and until his removal to Dijon he personally witnessed all the early bombardment, and he is, therefore an eye-witness of the most impeccable kind. Keeping closely in touch with Reims after his transfer to Dijon, he was easily able to follow the later phases of the bombardment.

His book has, therefore, a quite unrivalled interest and value. He knew his church as few people knew it; he knew his city of Reims and the people in it; while residing there he knew, personally, the exact damage done by every shell; he knew the conditions that attended the bombardment; he was thoroughly competent in every way to prepare an authoritative book on all its aspects. His is no historical survey of construction or aesthetic critique; these aspects of Reims have been thoroughly treated by a multitude of writers. His theme is his own; the ruin and tragedy of his cathedral, a topic that, so recently as five years ago, no living man expected to witness or describe.

He begins with the arrival of the Germans on September 4, 1914, on which day the first shell fell on the cathedral, and which practically put an end to the patriotic services that had daily been held in the church from the opening of the war. The opening of the tragedy is vividly described, and the whole hideous tale is narrated in the following pages with painful details of the injuries wrought. The details of the story are best followed in Mgr. Landrieux's own pages; but it may be stated that he notes 159 shells as falling directly on the cathedral from September 4, 1914, to March 21, 1918. Of these, 63 shells fell in 1914; 32 in 1915, 7 in 1916, 51 in 1917,

not including an uncounted number that fell on the terrible day of April 24; 6 in 1918 up to March 21. 42 of these shells fell before the great fire of September 19, 1914, and 117 after it. Records are wanting as to the fall of shells between March 21 and June 25, 1918; but after that date 128 additional shells were noted, a hideous total of 287 recorded shells. Reims itself was bombarded for 1,051 days. Small wonder there is little left or that the city is utterly ruined.

It is not too much to say that no intelligent person placed any dependence on the German claims for the necessity of bombarding the cathedral. But this need no longer be a matter of faith or of belief; Bishop Landrieux devotes a lengthy chapter to an examination of the German claims, and thoroughly establishes their falsity. Few non-Germans needed to be convinced on this point, but it is well to have so complete a refutation as Mgr. Landrieux gives.

The German claims are well known and rest on two particular points: that the towers were used as posts of military observers and that a battery of guns was concealed behind the cathedral. Mgr. Landrieux, then a resident of Reims, would certainly have known of the concealed battery, and his indignant denial that such a thing existed may be, and will be, accepted without further controversy. As to the use of the towers he brings out the hitherto little known fact that owing to the injuries of the bombardment it was utterly impossible to climb to their summits, and particularly to the top of the south tower, which the Germans claim to have been especially used. His photograph of the injured stairs is conclusive evidence. He examines the whole subject with great detail, and, as was to be expected, leaves the Germans without the smallest foundation for their claims.

Perhaps more absurd is the German claim that the cathedral was burned because of the lack of firemen and fire-extinguishing apparatus in Reims or near the cathedral. The conclusion is obvious; the cathedral was burned, not because the Germans set it afire, but because the authorities did not put it out! Bishop Landrieux dismisses this preposterous statement with the contempt it deserves. As for the fire, the Bishop brings out with some force the statement that the cathedral was burned from both ends, from the north tower, which had been surrounded with scaffolding, and from the chevet, showing very clearly that the catastrophe, if not directly caused by an incendiary bomb, was certainly greatly increased by it.

As for the German claim that wounded Germans in the cathedral were shot down by French soldiers in trying to escape from the burning building, Bishop Landrieux was a more than interested spectator. Reaching a doorway he found it thronged with wounded Germans seeking refuge elsewhere; immediately before them was a group of soldiers ready to shoot them down if they came out. Mgr. Landrieux protested against such barbarity, but the sergeant in charge claimed that they were his orders. Whether this was actually so or not is not stated, but Mgr. Landrieux at once exclaimed that if they were going to do this they could begin with shooting him! The matter was finally adjusted by an agreement on the part of the Germans that they would make no effort to escape, and the prisoners were quietly conducted to the Hotel de Ville.

The book is completed with a portfolio of 96 plates, comprising 148 photographs of the cathedral in various stages of the bombardment. The collection has been admirably made and is quite complete. It is a valuable record of an atrocious crime. Special interest will be taken in the plan of Reims, showing the cathedral and the immediately adjacent land on which is marked the place where every shell fell in the bombardment from September 4, 1914, to March 21, 1918. It was drawn by M. Max Sainsaulieu, the architect of the cathedral, from data collected by Mgr. Landrieux.

Soissons, like Reims, has been bombarded throughout the war, and its cathedral more seriously injured, yet few details of this catastrophe have been made known. The martyrdom of Soissons has

been extremely painful and thoroughly complete; but being a much smaller city than Reims its trials have attracted less attention, and the ruin of its cathedral, as a lesser church, has seemed less noteworthy than that of the great metropolitan church at Reims. But the history of Soissons in the war is no longer a sealed book, for its bishop, Mgr. P. L. Péchenard, has just published an exhaustive account of his episcopal city in the war, *La Grande Guerre, Le Martyre de Soissons.*

It is a book of absorbing interest, vividly written, and gives, for the first time, a complete survey of events at Soissons during the war. Although Soissons was not subject to the almost daily bombardment that was the fate of Reims, it was bombarded, and very seriously, at stated times. At least five major bombardments are cited by Mgr. Péchenard. The first lasted for 27 days, from September 12 to September 29, 1914; the second began on November 1, 1914; the third on November 21, 1914; the fourth bombardment was in June and July, 1915; the fifth in March, 1917. These were the "high lights" of the bombardment, but there were many lesser catastrophies.

The history of the bombardment of Soissons is not unlike that of Reims. The Germans entered both cities early in the war. Soissons surrendered September 1, 1914, and the Germans withdrew 12 days later, on September 12. In leaving Reims they seized forts beyond the city from which they could easily bombard it, and from which they could not be dislodged. In leaving Soissons they occupied quarries where they were similarly strongly entrenched, and which were fatally available for bombardment purposes. On March 19, 1917, it was officially announced that Soissons was disengaged. The Germans, after leaving Reims in 1914 never returned; Soissons was not so fortunate; for they came in again on May 28, 1918, and its ultimate freedom is a part of the noble history of the Allied victory.

The bombardment of Soissons began with so much severity that the evacuation of the city was ordered at an early date. The Bishop himself was compelled to leave on January 15, 1915, and found refuge in Château-Thierry, then regarded as a perfectly safe place. He was only able to get back on April 25, 1917. May 27, 1918, being away from Soissons in an episcopal visitation, he was unable to return, and was compelled to travel in a cattle car, filled with soldiers and wounded, finally finding refuge in Le Mans.

It has, therefore, been impossible for Mgr. Péchenard to give the story of Soissons even chiefly from personal observation. But his sources of information were trustworthy and extensive, and his book really loses nothing in value because he did not himself personally witness everything he describes.

The injuries to the cathedral began with the bombardment, and were continued throughout the whole period. It seemed particularly the object of the enemy shells on many occasions; on November 4, 1914; December 7-9, 1914, on the latter day 24 bombs fell on the cathedral in the morning alone. Again on January 15, 1915, February 2, 1915, February 5, 1915, and February 12, 1915, the cathedral was shelled. On February 28, 1915, it was directly struck by shells in a bombardment of 200 shells that fell on the city. Again on March 2, 9, 13, 21 further shells fell. A bombardment of June 17, 1915, appeared particularly directed against the cathedral. The tower and other parts were injured June 29, 1915. Other bombardments followed on June 29 and July 14, 1915. By the first of January, 1916, most of the nave was open to the sky. New injuries to the cathedral July 3-4, 1916. Again November 17, 1916, and December 18, 20, 23, 1916. By the end of the year the injuries had extended from the tower to the chevet, much structural damage done, and much of the rare old glass utterly destroyed. The Bishop sums up the damages in closing his book: the cathedral outrageously mutilated; the tower, the roof, the buttresses, the walls, the windows, the vaults, the furnishings, all seriously injured; nothing had been spared.

No one is so competent as Mgr. Péchenard to tell how these things were done and when. His book is one of the most interesting of the war books, and ranks high in the cathedral literature of the war.

FURNITURE STYLES

By Charles Over Cornelius.

THE reasons which led to the inception of the work and the accomplishment at which he aims in its writing are stated by Mr. Dyer in the foreword to his Handbook of Furniture Styles.* The book is meant primarily for the use of persons interested in housefurnishing who desire a reasonable correctness in their selection of useful furniture from the mass of period and pseudo-period designs which is at present flooding the market, and is another instrument in the campaign for the education of public taste which is engaging the efforts of writers and publishers today.

Such a book is necessarily a brief resume, a boiling down of pertinent information contained in larger and less popular volumes, and rendered in its condensed form more accessible to a public whose need for it is great, but whose interest does not permit of an independent study of the authorities.

The author meets his critics more than half way in two paragraphs which may be quoted:

"Such a condensation of a big subject must inevitably result in sins of omission, if not of commission. I am fully aware of the defects inherent in this sort of treatment; I know just what the critics and reviewers will say, and I am moved to forestall their criticism by certain admissions and disclaimers, and to inform the purchaser of this volume exactly what he is getting for his money."

"In the first place, there is nothing new in this book. It does not pretend to be the result of original research. There is not a fact or conclusion in it that is not to be found in any one of a dozen larger and handsomer volumes. I do not think I have added one jot to the sum of human knowledge on this subject. I have merely sorted out that knowledge and now present it in a new dress—or undress."

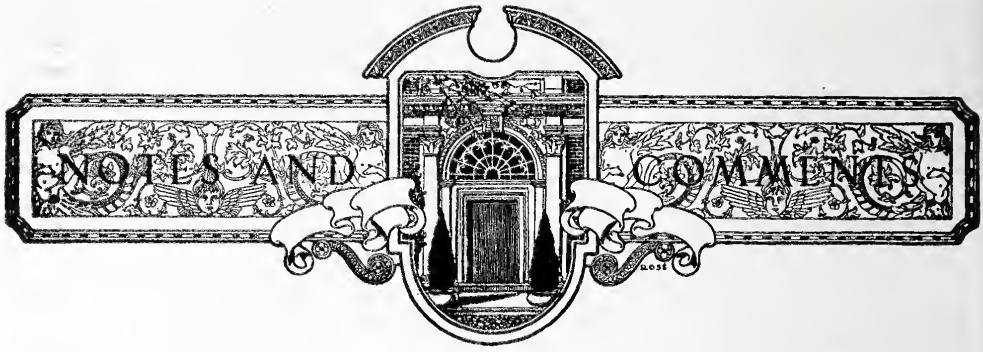
In the main, the division of the material is happily made, with an introductory chapter upon the use of period furniture in modern homes. Renaissance furniture in Italy and elsewhere is then taken up, with emphasis upon the architectural origins of its designs, the uses which dictated the forms it should take and its importance as a starting point for all the furniture design which came after. The remainder of the book follows the development of the furniture styles in France, England and America, as it ran its course through the seventeenth and eighteenth centuries to the breakdown of taste in the nineteenth.

In treating the different periods the characteristics in the design of the various styles in relation to their social or artistic origins, the constantly changing materials which entered into their manufacture, the articles of furniture most used and the names of the makers or designers of first rank, whose influence was particularly marked upon the work of their time, have all been kept in mind. The illustrations, mostly of examples in the Metropolitan Museum of Art, and thus accessible for examination, are excently chosen and arranged, with the purpose of emphasizing special points of the text by comparison of detail or form.

The tabulated details of the period styles at the end of the book, a still further distillation of the material, are convenient for reference, while the excellent bibliography contains most of the important works which are readily to be consulted by students and collectors.

To architects, the book will be useful for hasty reference, and particularly in an indirect way, as it comes into the hands of clients who cannot but find much interest in its content matter presented in the lucid manner which is characteristic of all of Mr. Dyer's writing.

*Handbook of Furniture Styles. By Walter A. Dyer, New York, The Century Company. Price, $1.50.



The "Esthetics of Engineering" Applied to New Bridges in Pittsburgh.

I think you will be glad to learn of the extremely significant action taken by the Allegheny County Commissioners with reference to the erection of three new bridges across the Allegheny River at Pittsburgh. An extraordinary opportunity—one probably not paralleled in the history of any American city—was presented to the Commissioners by the action of the Secretary of War requiring the erection of six new bridges in one locality practically at one time.

The Art Commission of Pittsburgh has been interested in obtaining designs of merit for this project and the County Commisioners, Addison C. Gumbert, Frank J. Harris and Gilbert F. Meyer, have loyally co-operated and supported the movement inaugurated about one year ago when Ralph Adams Cram, the eminent American architect, visited Pittsburgh for the purpose of delivering an address on the subject. The first practical result of the movement is announced by the County Commissioners—two able and eminent architects residing in Pittsburgh, A. B. Harlow, the designer of the Carnegie Institue, and Benno Janssen, a man of exceptional ability, have been selected, together with a New York firm, to provide plans for three of these bridges.

In pursuing this course the Commissioners have adopted a policy which is a distinct recognition of the importance of art in connection with works of utility. I doubt not that the other three bridges will be designed upon a high standard of artistic merit. The influence of these works will doubtless ultimately extend throughout the country.

JOHN W. BEATTY.

A Community House in Kansas.

Experiments in democracy are in order. War clears men's heads and they are open to suggestions for their own improvement. When such suggestions are linked with the welfare of the fighting man they are given careful attention. Kansas, more particularly the city of Manhattan, had to solve the problem of taking care of the many thousands of soldiers frequenting the town on furlough from the adjacent cantonments, Fort Riley and Camp Funston. At the same time Manhattan possessed a sufficient number of long headed men to realize that the remedy for this emergency was not necessarily very different from the remedy for a condition affecting all cities at the present time—namely, the problem of making the city more livable chiefly by the introduction of legitimate means for obtaining clean and wholesome entertainment. Therefore the city fathers of Manhattan decided to let good sense control speed in such degree that instead of erecting a wooden hut to care for these many men in khaki and then scrap the hut after the armistice was signed they built a fireproof brick structure which would outlive the war and serve their own community.

The building which met these ends is in fact a large hall, with necessary accessories, the idea of a gathering place being logically uppermost in the project. The hall is equipped as a suitable space for dancing or other frivolous entertainment, but has in the brief history of the building already served such varied purposes as those of a baby show, a public reception and a pig-club convention all within three days' time. In general the interior becomes a sort of public parlor, furnished with multitudinous chairs, tables, lamps, curtains



COMMUNITY BUILDING, MANHATTAN, KANSAS.
H. B. Winter, Architect.

and other items that lend color. The small space in the building not required for the main hall is used for office and storage space, kitchens and the requisite assignment of space for circulation and for retiring rooms.

During the war this building was under the control of the War Camp Community Service, which maintained there no less than ten different divisions of its own work. In addition other relief organizations found quarters there: the Civilian



COMMUNITY BUILDING
Manhattan, Kansas.

FIRST FLOOR PLAN
Scale 1/4" = 1'

Relief Bureau of the Red Cross, and the War Department Commission on Training Camp Activities. The building thus served in an intensive way the immediate needs of the men in training for whom it became a club. At the same time the nature of the materials and method of construction provided the city of Manhattan with a permanent edifice to serve its own citizens after the soldiers had been dispersed. What is more, the building will always retain the atmosphere of having been prompted by national service.

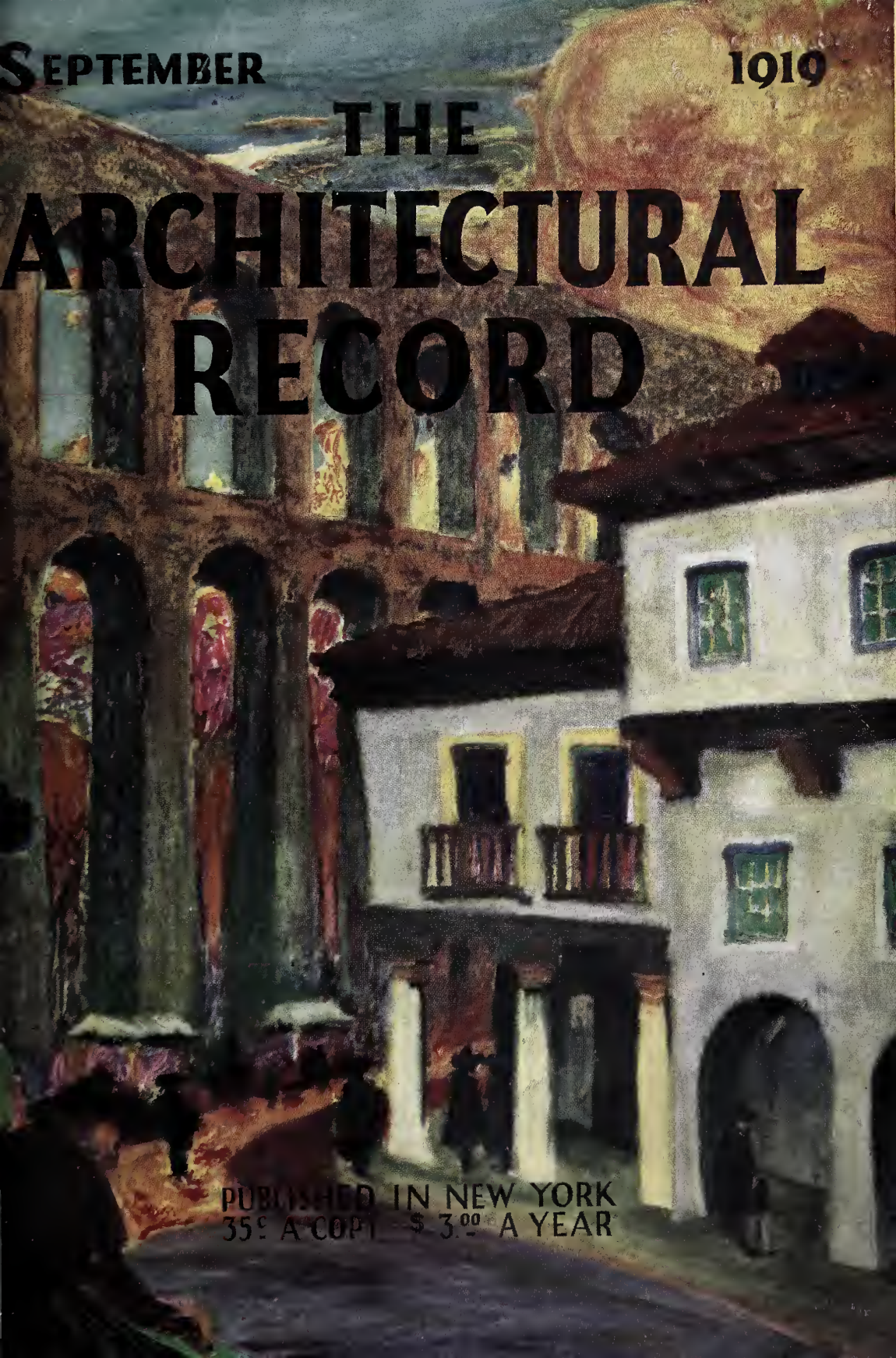
The Community House was projected on a co-operative basis. The city of Manhattan numbers but 7,500 souls, but it saw fit to get up a bond issue which brought between fifteen and twenty thousand dollars. The Rotary Clubs of the Twelfth District added $13,500 for the building and $2,500 more for the furnishings.

We have here an enviable example. Other communities may no longer have the opportunity of founding such institutions under the service ideal; yet they have the same opportunity of erecting a building to serve as a public centre of good will and good fellowship. Manhattan has indicated the method and has done manfully despite its small population, making itself a centre of attraction for surrounding counties. Finally this city at least has already erected a structure which may be used as a war memorial and in which its mementos of the struggle may be preserved.

RICHARD F. BACH.



AUDITORIUM—COMMUNITY BUILDING, MANHATTAN, KANSAS.


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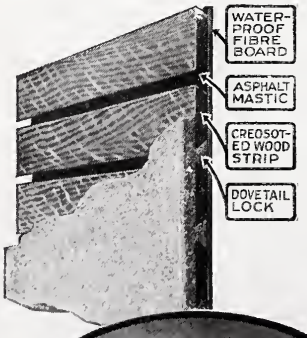
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Business Manager: J. A. OAKLEY

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Yearly Subscription—United States $3.00—*Foreign* $4.00—*Single copies* 35 *cents. Entered May* 22, 1902, *as Second Class Matter, at New York, N. Y. Member Audit Bureau of Circulation.*

PUBLISHED MONTHLY BY
THE ARCHITECTURAL RECORD COMPANY
115-119 WEST FORTIETH STREET, NEW YORK

F. T. MILLER, Pres. W. D. HADSELL, Vice-Pres. J. W. FRANK, Sec'y-Treas. E. S. DODGE, Vice-Pres.



ENTRANCE TO LARGE HOUSE—RESIDENCE OF A. L. GARFORD, ESQ., OAK KNOLL, PASADENA, CAL. MARSTON & VAN PELT, ARCHITECTS.

THE ARCHITECTVRAL RECORD

VOLVME XLVI NVMBER III

SEPTEMBER, 1919

The RESIDENCE OF A. L. GARFORD, Esq. OAK KNOLL, PASADENA, CAL.

Marston & Van Pelt, Architects

By CHARLES OVER CORNELIUS

IN the history of patronage, the cultivated taste of the patron is accorded a degree of recognition almost equaling that which is given to the creative work of the artist, and not without reason. Appreciation of an artist's work and of his point of view in doing what he does, has such a positive effect upon his accomplishment that it is difficult at times to assign justly the original source of the impulses which determined a given artistic result. Folk art of all kinds is built upon this sympathetic interrelation of the creative and appreciative points of view, and folk art is not so far removed from the great art of a people as many would have us suppose.

It is in this circumstance that we find the explanation of the quick development and gratifying results in the design of country and suburban house architecture in the United States. As in no other branch of architecture, the client and the professional man meet upon a nearly equal plane; and an *entente cordiale* of real spontaneity is created due to a mutual respect for each other's opinion, an association which, when multiplied by the number of its frequent occurrences, has led the more optimistic critics to feel that in this branch of the art will be found to lie America's most genuine contribution to architecture.

In the design of the dwelling house, the development shows a remarkable and rapid response to the varying and changing needs of society, a definite approximation to the individual family groups. Here are reflected the esthetic tastes of the more cultivated element of the country, the presence or absence of formality and ceremony in the relations of every-

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day life, the relative pleasure derived from the outdoors, in beautiful gardens and magnificent views, or from indoor life with its drawing-rooms, music-rooms and libraries. It is this aspect of the subject of house planning which gives it its very unusual interest; in its development can be traced the social history of a people for any given time.

The house of A. L. Garford, Esq., in Pasadena, Marston & Van Pelt, architects, is particularly interesting because of its plan. In a land of such unrivaled and individual beauty as that in which this house is placed, a predominant consideration was the site, in relation to the view which may be enjoyed from it and to the design of the house. The location of the house, on the crest of a small hill, has permitted a certain regularity of roof line and irregularity of plan which is a natural response to the ground levels. Its main axis gives a clear vista over the tree tops to the sunny country beyond them, and the terraces, porches, and belvidere all concentrate upon this aspect.

The plan of the house itself follows the natural land grades, and in its somewhat irregular form satisfies the necessity of a desirable façade toward the street from which it is entered, as well as toward the view to the north and east.

The group is composed of two entirely self-contained dwellings, served with equal convenience by one driveway, and united by a long porch and porte-cochère The smaller house is not unusual in its arrangement and meets all the requirements of a house of its size, its chief interest lying in the treatment which makes it an integral part of the whole plan.

In the larger house a more formal arrangement is adopted with a cruciform plan as its key. The entrance on the main axis for the vista is directly opposite the long doors to the terrace. To right and left open library and living-room, well proportioned in themselves and of good relation to each other, whose fireplaces respond invitingly. The transition to the wing, at an oblique angle, is simply made, with no waste of space and with a distinct feeling for the forms of the rooms. The service wing is compactly arranged and is connected by a covered way with the garage beyond it. The whole plan presents an open-minded approach to the problem, which has been solved with the greatest economy of space consistent with dignified effect.

The exterior presents an adapted use of Spanish baroque detail, sparingly used upon a building whose mass, quite individual in form, is a direct expression of its plan. The porch which connects the two units of the group is the chief, one may say the only, unifying element. The entrance bay of the main house forms the dominant motif upon the south elevation, while its corresponding face upon the north side forms here the most strongly marked element, both in design and decoration. This bay suffers somewhat from an over-emphasis upon verticality, which would have been avoided by a closer horizontal tie to the right as well as to the left. The wings of the house reach out at either side with a fenestration which appears to be less studied than casual.

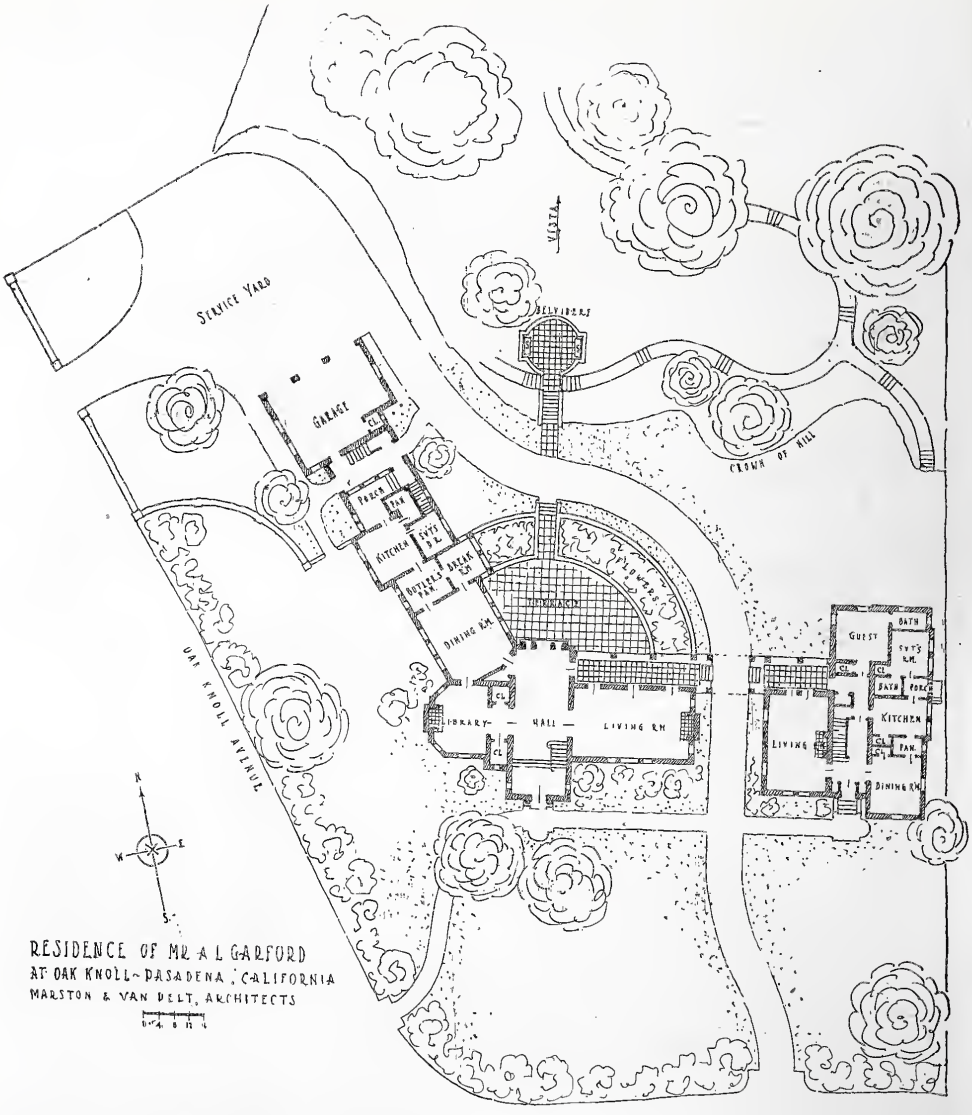
There is a certain lack of unity in the design of the exterior, and a disregard of any subtlety of composition or study of effects of light and shade, both so important in work of this type. Of the exterior details, the entrance doorway comes nearest to a successful treatment. Yet here, too, the verticals are too insistent in the absence of any balance of horizontals. This bay, which is repeated in a different form on the north side, would have gained in effect by a different roof treatment, something which would break up the general uniformity of the roof-line and give a more special quality to the bay itself.

The treatment of the walls surrounding the service yard is unqualifiedly successful. The flat white surfaces surmounted by the molded coping are straightforward and a pleasing background for any planting which is anticipated, and the smaller gateway is charming in its form.

The choice of the adapted Spanish style demands a very considerable skill on the part of the designer. The training of American designers as applied to decoration is by no means so great as in



ENTRANCE TO SMALL HOUSE—RESIDENCE OF A. L. GARFORD, ESQ., OAK KNOLL, PASADENA, CAL. MARSTON & VAN PELT, ARCHITECTS.



BLOCK PLAN—RESIDENCE OF A. L. GARFORD, ESQ., OAK KNOLL, PASADENA, CAL. MARSTON & VAN PELT, ARCHITECTS.



FRONT ELEVATION—RESIDENCE OF A. L. GARFORD, ESQ., OAK KNOLL, PASADENA, CAL.
Marston & Van Pelt, Architects.



NORTH ELEVATION—RESIDENCE OF A. L. GARFORD, ESQ., OAK KNOLL, PASADENA, CAL.
Marston & Van Pelt, Architects.



NORTH ELEVATION—RESIDENCE OF A. L. GARFORD, ESQ., OAK KNOLL, PASADENA, CAL.
Marston & Van Pelt, Architects.



DETAIL OF NORTH ELEVATION—RESIDENCE OF A. L. GARFORD, ESQ., OAK KNOLL, PASADENA, CAL.
Marston & Van Pelt, Architects.



GATE TO SERVICE COURT—RESIDENCE OF A. L. GARFORD, ESQ., OAK KNOLL, PASADENA, CAL.
Marston & Van Pelt, Architects.



GATE TO SERVICE YARD—RESIDENCE OF A. L. GARFORD, ESQ., OAK KNOLL, PASADENA, CAL.
Marston & Van Pelt, Architects.



STAIR HALL—RESIDENCE OF A. L. GARFORD, ESQ., OAK KNOLL, PASADENA, CAL.
Marston & Van Pelt, Architects.

its application to planning, and it is in the planning of a dwelling house that the co-operation between client and architect is closest, the trained man interpreting in his technical terms the wishes and requirements of the owner. This art of planning comes very close to expressing the life of a people and in its range may run all the way from the so-called folk art to a dignified expression which makes full claim to beauty for its own sake and surrounds life's daily activities with a meaning above and beyond its merely routine motions. A house which fails to register this accomplishment of unifying its plan and interior treatment with the life which is passing within it, fails to respond to the most important demand laid upon it, while its success in this regard is an ever new reason for approbation. The residence which we have just considered presents a truly gratifying success in the treatment of its plan, which is clever and unusual in its combination of use and comfort with a just consideration of the relative importance of the units in the design, and, in addition, furnishes a most individual interpretation of a house for two families, united yet each distinct.

HILGARD HALL
~University of California~

John Galen Howard, Architect

By Richard F. Bach

THE buildings of our larger universities are representative of the steady advance of American architecture. No other type of building reflects so promptly the trend of thought in a land of democratic thinking. Out of the universities come the guiding ideals of our life as a nation and as individuals. In the molding of character architectural environment has inspirational and incentive value, and this is particularly true with respect to colleges and universities.

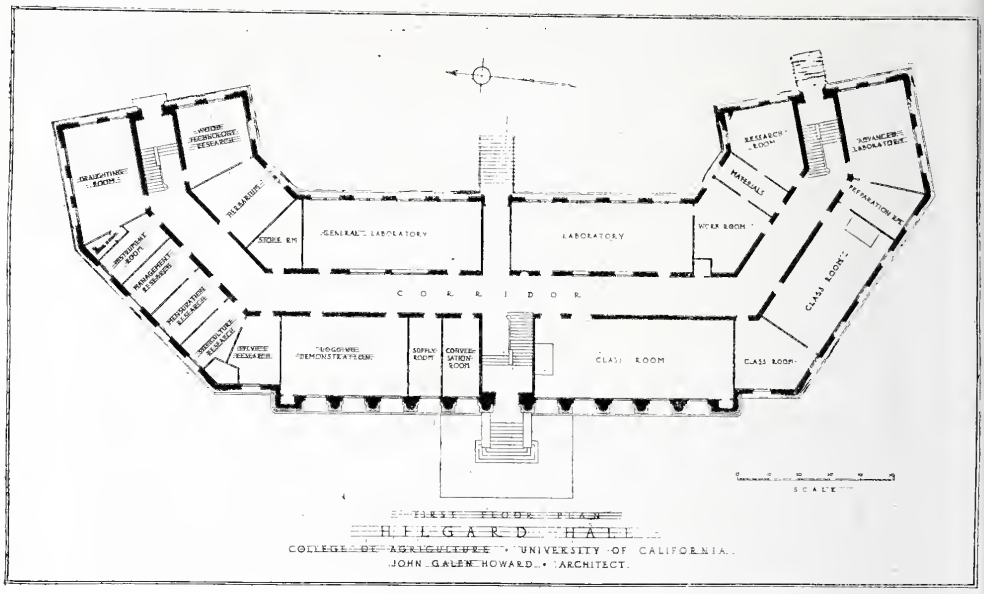
In America we are still building our collegiate institutions; their traditions are still green and their architecture therefore is not so well seasoned and tried as are the old quads in England or the moldy walls of Continental universities that date their beginnings before the Renaissance. Yet we have certain advantages because of our youth. There is the matter of group planning, and the matter of safety for numbers, there is the matter of scientific perfection of equipment for buildings in which science is to be taught. Of these the group plan has the most to offer to the imagination.

Not the least interesting feature of the newer plans is the factor of local color. There are projects in pure Collegiate Gothic reflecting Oxford and Cambridge, there are other Gothic derivatives, there are projects in pure Italian Renaissance of the municipal type, and there are still others that have responded more faithfully to the demands of their own soil, and while harking back to Italian or other motives nevertheless seem to have struck a decidedly individual track expressive of their own environment and future. Of these the University of California is one.

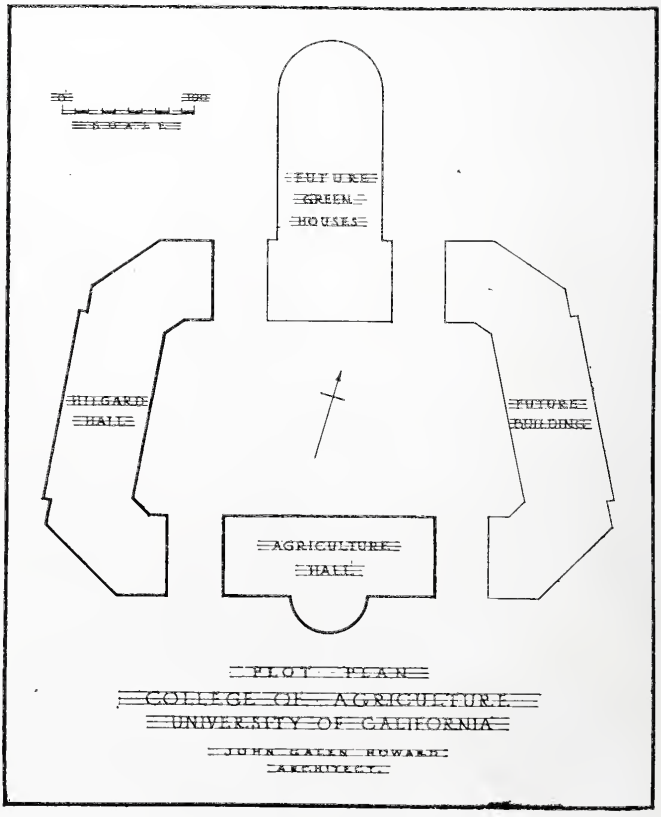
At California the rule of sunlight and color has been obeyed. There are seen in all the buildings refreshing plain areas not tortured by conflicting shadows, and there is ample evidence of regard for the possibilities of color in American buildings.

Hilgard Hall is one of four units ultimately to constitute the group of buildings to be devoted to agriculture. Agriculture Hall, already in place, was the first of the units to be completed. As is seen in the block plan, Hilgard Hall flanks this first building and forms the second side of the trapezoid that will in the end be the agriculture quadrangle. The quadrangle will, however, not be so severely hemmed in by buildings as is usually the case, first because the halls are all no more than two stories in height, second because the fourth side of the quad will consist of greenhouses.

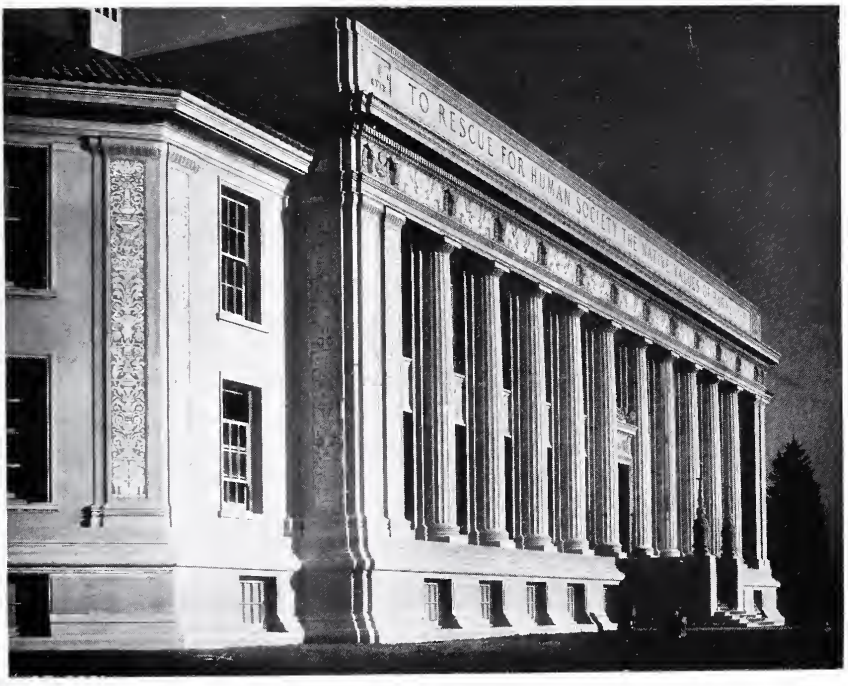
Hilgard Hall is on plan in the form of a shallow letter U. Its important exterior face presents an engaged Doric order, set upon a high base, itself broken by window openings and by a stairway approach occupying the central intercolumniation. The order embraces two stories, the floor level being indicated by decorative panels between the shafts. The entablature presents a series of delicately treated moldings, in keeping with the decoration of the frieze, which is worked out in a combination of relief skull motives, or bucrania, and sgraffito plaster ornament in several colors. Sgraffito likewise appears at several other points of vantage, notably the pilasters



FIRST FLOOR PLAN
HILGARD HALL
COLLEGE OF AGRICULTURE, UNIVERSITY OF CALIFORNIA.
JOHN GALEN HOWARD, ARCHITECT.



PLOT PLAN
COLLEGE OF AGRICULTURE
UNIVERSITY OF CALIFORNIA
JOHN GALEN HOWARD
ARCHITECT



HILGARD HALL, UNIVERSITY OF CALIFORNIA.
John Galen Howard, Architect.



HILGARD HALL, UNIVERSITY OF CALIFORNIA.
John Galen Howard, Architect.



HILGARD HALL, UNIVERSITY OF CALIFORNIA. JOHN GALEN HOWARD, ARCHITECT.



HILGARD HALL, UNIVERSITY OF CALIFORNIA. JOHN GALEN HOWARD, ARCHITECT.



HILGARD HALL, UNIVERSITY OF CALIFORNIA. JOHN GALEN HOWARD, ARCHITECT.



HILGARD HALL, UNIVERSITY OF CALIFORNIA. JOHN GALEN HOWARD, ARCHITECT.

which emphasize all vertical angles of the building. These features achieve an added value because of the pale gray stucco background offered by the walls.

The design of the sgraffito has been carried out on a variegated system of ground colors, against which the ornament is relieved in white. In the doorways the ground color is a pale neutral yellow or cream color; the same is true of all reveals and soffits. The main pilasters, borders and friezes were executed in a Tuscan red ground color with a cream face color for the ornament. The ten symbolic panels appearing between columns were developed in three colors, gray interposed between a Tuscan red ground and a creamy face color.

These experiments in sgraffito as applied to American architecture were supervised by Paul E. Denivelle, who was Supervisor of Texture and Modeling at the Panama Pacific International Exposition. We may say without reservation that the results are splendid. Undoubtedly critics will demand stronger colors in certain parts, perhaps strong blues will be desired by some, but color like other types of beauty may be said to lie very much in the beholder's eye.

There is no question whatever that sgraffito is an amenable type of ornament for American buildings. It can be handled with no undue amount of effort and it has advantages for flat color combined with relief semblances equaled by no other medium. Above all it is characterized by firmness and mural quality derived from the fact that the color is an integral body color mixed in the material used.

Several other experiments have been made in this direction; in New York we have in mind the Alexander shoe shop on Fifth Avenue, the building erected as the Astor Market on Broadway at Ninety-fifth street, a phonograph establishment on Forty-second street and the Booth and Shubert theatres. These are isolated examples of a technique fraught with many possibilities. During the Renaissance in Italy this method of plaster decoration, consisting in effect of nothing more than the overlaying of thin coats of plaster of differing colors and of scratching through these coats to the desired depth to bring out the color wanted in a given place, found frequent application. Narrow streets, wall areas of considerable extent due to reduction of window space made necessary in the southern climate, all coupled with the Italian's inborn desire for movement and color, found a ready servant in the lively and responsive medium of sgraffito. Notable examples are the Palazzo Ricci and the Palazzo Torrigiano, both in Rome.

Other notable features in the ornament used in Hilgard Hall are seen especially in the treatment of the main doorway, where the symbolic use of floral and fruit forms blends well with the conventionalized motives used in the door frame, consoles and metal gates. Other entrances are surmounted by balconies and decorative window treatments reminding one of the Certosa at Pavia.

Gilman Hall is likewise of stucco finish. Both of these buildings differ from the others at the University of California, most of which are of marble. In Gilman Hall there is less opportunity for the skilful use of color; an Ionic order of Greek chastity is used. This building forms one short side of a minor group plan, which is to take the stereotyped square-sided figure eight shape, with two courtyards.

John Galen Howard, architect of the buildings of the University of California, is director of the College of Architecture at that institution. In the buildings with which they are constantly associated his students have inspiring examples to emulate, and in the high caliber and restrained processes of thought which these buildings illustrate they have unfailing guides to leadership in the architectural profession.

SUGGESTIONS & MODELS FOR ARCHITECTURAL RENDERING

The LITHOGRAPHIC WORK OF DAVID ROBERTS, 1796–1864

By
LEON V. SOLON

THE manner in which an architectural drawing is to be prepared or, to use the professional term, "rendered" for the client's consideration involves a problem of increasing importance to the architect, one worthy of unbiased analytical study. Judgment and experience are unanimous in proclaiming analysis an inflexible process; candor, therefore, is an elementary necessity in stating a premise. Accuracy in the statement of our case compels us to admit reluctantly that professional interest in "rendering" proceeds from a commercial motive rather than from a disinterested desire for progress. A frank recognition of this fact calls for no apology; the time is surely ripe for discarding the foolish custom whereby the work of art is of necessity enveloped in a web of fictitious romance. Is it not also time to abolish the illogical prejudice that assumes art degraded by any association with methods practiced by the trader? This fallacy has been maintained in the face of direct contradictions recorded in the lives of many of the most famous masters, until it assumes almost the status of an article of faith.

Main Defects in the Average Rendering.

For a considerable period a mechanical type of rendering has prevailed; many well-conceived designs have suffered a heavy discount of appreciation through grossness of pictorial technique, and an intensely "bourgeois" treatment in composition. If a number of the average type be examined, they will reveal certain common defects, the most serious being the absence of any apparent intent to compose the subject, lack of appreciation of the value of line-quality as an element in atmospheric effect and complete obliviousness to one of the most powerful resources available for conveying a pictorial or decorative impression—chiaroscuro.

The Commercial Value of Rendering.

The "rendered" drawing might be likened to the prism; it is the instrument through which the fixed professional angle of the architect's perception is diverted to one appreciable by his client. Pictorial quality, existing independently of realism, is the most natural and direct agent for the transmission of an architectural conception to the lay mind, unaccustomed to think in terms of plan and elevation. The extent to which the client may be influenced by a skillful rendering is illustrated in the following incident. A prominent banker decided to erect new banking premises of considerable pretension. When the contract was awarded, a clause figured therein to the effect that if either architect or contractor submitted a perspective before the building had reached the second floor, such action would render the agreement with either void. The banker explained that in previous enterprises he had been unduly influenced by clever, colored perspectives, for which reason he excluded them as prejudicial to a free exercise of his judgment.

The Quest for Models of Technique.

Models are necessary for the guidance of those who desire to leave the beaten rut of mediocrity; the author conse-

quently has explored many unfrequented paths in pictorial art in which the architectural subject constituted the motif, either by reason of its intrinsic beauty or because, through the picturesqueness of its surroundings, it became a source of pictorial inspiration.

In seeking a new fund of influence it is necessary to direct our attention to schools that had aims identical with or corresponding to our needs, or that possess those qualities we aspire to emulate.

The elementary basis of the "school" in the arts lies in specialization; this specialization concentrates on certain qualities, pre-eminently sensed. One group of painters, for instance, recognized as a school, indulges an intense affection for minute and precise statement; another cultivates breadth at the expense of detail; a third loves sensuousness of form more than voluptuousness of color; the next, sumptuousness of tone to the elimination of extreme refinement of form; and so on, through the range of qualities and beauties, intellectural and technical.

It is necessary, therefore, to designate those qualities that are, for the moment, essential to the "rendering," and find the school which possesses the greatest number in the most sympathetic form. If these essential qualities are technique in draughtsmanship, versatility in composition, and a command of the subtle and dramatic resources of chiaroscuro, applied to architectural subjects, certain members of the British school of painters and lithographers of the late eighteenth century and early nineteenth century stand forth pre-eminently endowed with what we seek.

Though many eloquent phrases have been written regarding the leaders of this school by writers as eminent as Ruskin, we are unable to accept their judgment concerning the relative values of each, for the reason that conclusions were arrived at through weighing other qualities than those we consider.

A long period of neglect has elapsed since Ruskin lauded their beauties, and it is not proposed here to give the endorsement of this master of prose as a credential of value. In the immature days of the author's studentship of painting, when youthful enthusiasm could not recognize merit apart from vogue, this particular school embodied all the opposites to the favorite creeds; it is interesting now to discover so many beauties in works formerly discriminated against.

For our present purpose we must commence by transferring the laurels of leadership, placed by his contemporaries on the brow of Prout, to that of David Roberts, whose works exhibit in the greatest degree that combination of qualities which our students of architectural technique and pictorial composition are most deficient in. It has frequently happened that a later generation, with corresponding sympathies and selective prejudices, reverses the arrangement of contemporary esthetic valuation.

Any object meriting the title of "work of art" is an aggregate of diverse intellectual elements; such works are generically classified according to the predominance of distinctive qualities or characteristics, imaginative or technical. The creators of works so grouped were attracted to their common points of view, through an abnormal susceptibility to specific esthetic qualities, which controlled their instinct in selection. This magnetic force, the genesis of the school, is only generated in individuals of strong personality, and is reacted to in their work after their various manners; the prevailing cachet of thought of their day adding yet another distinctive imprint to its character.

It is precisely the change of these prevailing modes of thought, reflecting social conditions, which causes a later generation to rearrange the order of precedence determined by contemporaries. Though the esthetic aspirations of the generation reviving a point of view may coincide with those of the generation creating it, the appraisal of relative values is often as much influenced by extraneous considerations as by intrinsic merit, all these indeterminate and unstable qualities giving varying totals in their combination.

The main argument for placing Roberts in the foremost place is that he most successfully combines those contrasting qualities so essential to our idea of an adequate architectural rendering—precision in the general statement of form and mass, and freedom in its graphic transcription.



GATEWAY AT CORDOVA.

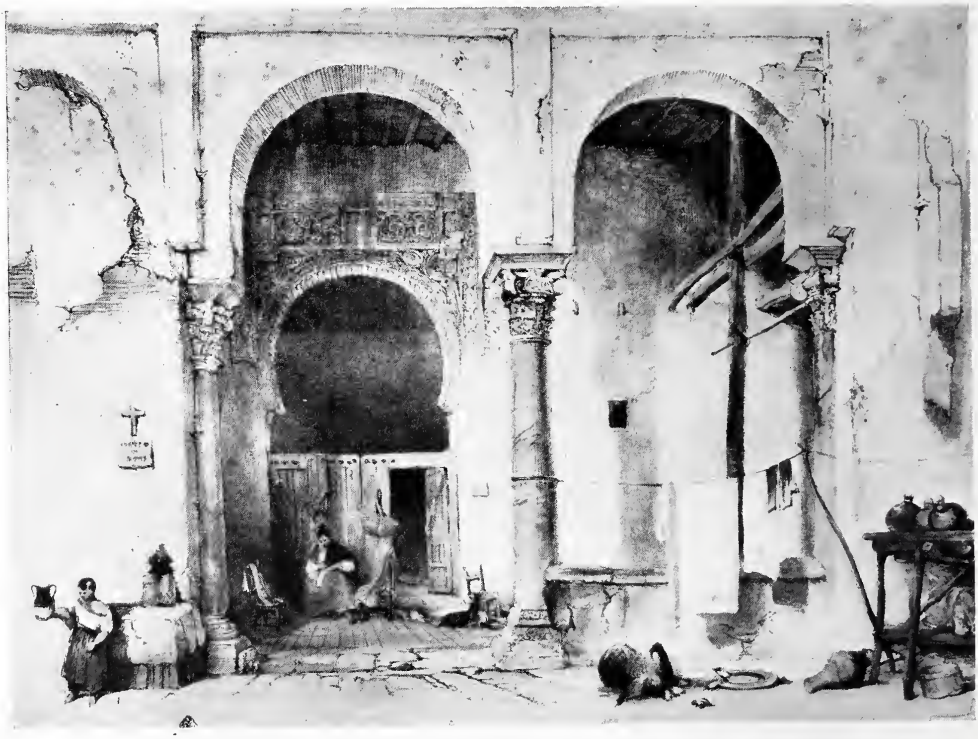
The foible of our day is for poetic versions of mathematical calculations, any license being welcome that leaves our facts intact. Our predilection for accurate information impels us to reject the Prout technique. In Prout's treatment of architectural detail a conventional raggedness is affected, with the object of augmenting romance by exaggerating decay. This was a reflection of the intellectual attitude of his day, which preferred to consider in an architectural masterpiece the hoariness of its age rather than the indestructibility of its beauty; for Prout antiquity appears to be synonymous with disintegration.

David Roberts' Work in Lithography.

Incidents in the life of David Roberts, such as his record as an exhibitor, admission to various art societies, his suc-

cesses, and his travels, must perforce be eliminated from a brief appreciation of peculiar qualities in his work, which aims to stimulate interest in his technique rather than curiosity concerning his personality. He was born in Stockbridge, Edinburgh, in 1796, and died in the year 1864. His father was a shoemaker, and apprenticed him to a housedecorator and painter for seven years. In 1822 he went to London, where he worked as a scene-painter while pursuing his career as a landscape painter. As a painter he acquired considerable reputation, being finally elected Royal Academician. The record of prices paid for his work at exhibitions proves that esthetic appreciation was supplemented by financial success.

As a painter he was much influenced by Turner and other members of that school in their endeavor to realize atmospheric quality in landscape, causing him occasionally to make use of cobalt to an undue extent as a means to that end. An anecdote is handed down at his expense, which recounts that on one occasion Roberts was expatiating on the merits of this favorite pigment, saying: "It is the finest color out; it will stand damp, gas, or cleaning; there's nothing like it." C. R. Leslie, the painter, who was one of the group present, retorted: "I will tell you one thing it won't stand—it won't stand looking at."



LOGGIA.

P. G. Hamerton, the British art critic, was evidently not a believer in the recurrence of esthetic influences as a general rule. He wrote of Roberts in the "Portfolio" in 1887:

"As an artist David Roberts shone rather by the quality than by the extent of his powers. He composed well. His sense of architectural detail was fine and his drawing of detail suggestive. At the present moment Roberts is out of fashion, and it is not likely he will ever come in again. But the sterling quality

of his work will always preserve his name from oblivion."

There is practically no direct information concerning his lithographic work, or of himself as a lithographer. Louis Haghe made the lithographs from his studies and drawings in the Holy Land and Syria. Haghe's work can be identified in innumerable proofs; it is untemperamental in the extreme, and his proofs savor of transcription devoid of sympathy. He made no attempt apparently to reproduce or reflect the peculiarities of his model's technique or manner, but was quite content to translate it all into "Haghe."

In the lithographs of Roberts' sketches in Spain, we find the Roberts manner and technique in its full force, delicacy and distinction, the antithesis of the Haghe formula. Signatures on such works are superfluous; his personality shines out of every tint and line. The only reference to his work in stone is recorded in connection with this work. It states that Roberts was so disgusted with the manner in which his drawings had been done on stone that he remade



CHURCH OF SAN JACO.

the work himself, a fact needing no corroboration outside the work itself.

In these admirable impressions, the richness and delicacy of tone bespeak the painter, and a wonderful range in flexibility of touch reveals the habit of one



THE GATE OF ALCAIA, MADRID.

skilled in the passage of light in pigment. No trace is to be found of the conventional manner of Haghe and his contemporary workers on stone, whose ponderous technique so often reduces graphic poems in light and tone to uniform statements in lithographic formula.

His departure from contemporary convention shows us work in which ignorance of mechanical methods is compensated for by a breadth of view and skill of hand acquired in higher walks of art. We feel that he commanded a "vista" denied his brother craftsmen in lithography, and that he possessed a temperament of such pliability that unfamiliarity with a medium could not dwarf his sense of space and scale.

Ingredients of Effect Adopted by David Roberts.

Our illustrations are all taken from a publication of his lithographic drawings entitled "Sketches in Spain." Black ink is used to print the key-plate of all. The impressions are taken upon a smooth, heavy paper. A preparatory ground of yellow ochre is printed to enable Roberts to make use of white; this he employs to focus interest in a characteristic manner. Touches of other colors are sparingly used to enrich secondary detail and accessories.

Gateway at Cordova.

An excellent example of the manner in which he manipulates light, shade and tone to attain an imaginary or artificial pictorial result is the rendering of the gateway at Cordova. The focal point, or centre of composition, is placed on the left of the picture, comprising the near columns and the adjoining small house. The entire scheme converges on this centre of interest, accentuated by the use of white. Tone adjustment is deliberately contrived, with a calculation which might be open to the imputation of theatrical intention. The deep tone enveloping the near entablature has no other reason for

its presence than to serve as a foil to the focal point, regardless of realistic aims. His figures are so skillfully scattered that their function of bridging over lapses in architectural interest is not apparent at first sight.

to their translucency. A comparison of a number of Roberts' compositions reveals his antipathy to an unbroken base line in foreground buildings. The figures, animals and household accessories are so arranged that the curved



THE BRIDGE AT TOLEDO.

LOGGIA.

This example reveals Roberts' keen architectural sense by the manner in which structural detail is rendered and suggested. The carving over the Moorish arch, the caps and bases are interpreted with the greatest freedom, but with such understanding and truthful effect that it is possible to recognize and identify the minutest detail. He evidently considered the masses of shadow in the building itself awkwardly placed; he consequently carried the deep tone of the shadows through the picture by introducing the sombrely clad child on the left, and the group of dark earthen vessels on the right. The granular texture of the cast shadows adds much line on which they are grouped breaks the horizontal base line, which might otherwise have tended to separate the subject from the immediate foreground.

CHURCH OF SAN JACO.

The white color which is used to focus interest is more apparent in this cut than in the original, the ochre yellow on which it is applied in the lithograph being in less violent contrast than the gray halftone. The manner in which it has been used and its purpose are worthy of study and note. Many recent renderings of Gothic façades defeat their object by a mechanically uniform distribution of interest; to concentrate, Roberts chose to draw the eye with his "spot-light" method to a comparatively limited area, correspond-



MARKET PLACE, CARMONA.

ing to the radius which would be covered by the eye in one phase of attention or observation, were we studying the building itself. While the remainder of his subject is subordinate, it is executed with conscience, much suggestion and data being conveyed with the freest of line.

The Bridge at Toledo.

We might suspect Roberts in this drawing of seeking difficulties to exhibit his versatility in overcoming them. He has chosen a top-heavy subject, and stabilized it by the picturesque grouping and powerful lighting of the foreground details. These also mask the lack of interest around the pier bases. His use of reflected lights from the river softens and breaks up the massive slanting silhouette of the bridge overhead. Great liberities have apparently been taken with nature's habit of reflecting light on planes at given angles; he missed no opportunity of demonstrating one of his strong convictions—that nature should act as the servant of the artist, not as his master.

The Gate of Alcaia, Madrid.

The great shadow projected across the left of the arch is a typical example of a license he claimed to attain pictorial advantage. Recourse to this particular means was popular with his contemporaries. Prout in his instructions on landscape painting enlarges upon its advantages and justifies the use of shadows for the concentration of interest in any part of the composition, on the ground that a passing cloud before the sun might account for any shadow mass the artist could desire. Here again we find the base intersection concealed by serried masses of cattle and human beings. The distant town seen through the arches is rendered with great delicacy.

Market Place, Carmona.

Color figures here to a greater extent than usual in his lithographs, but there is no attempt at a solid treatment, and no pretense to convey any realism; it is

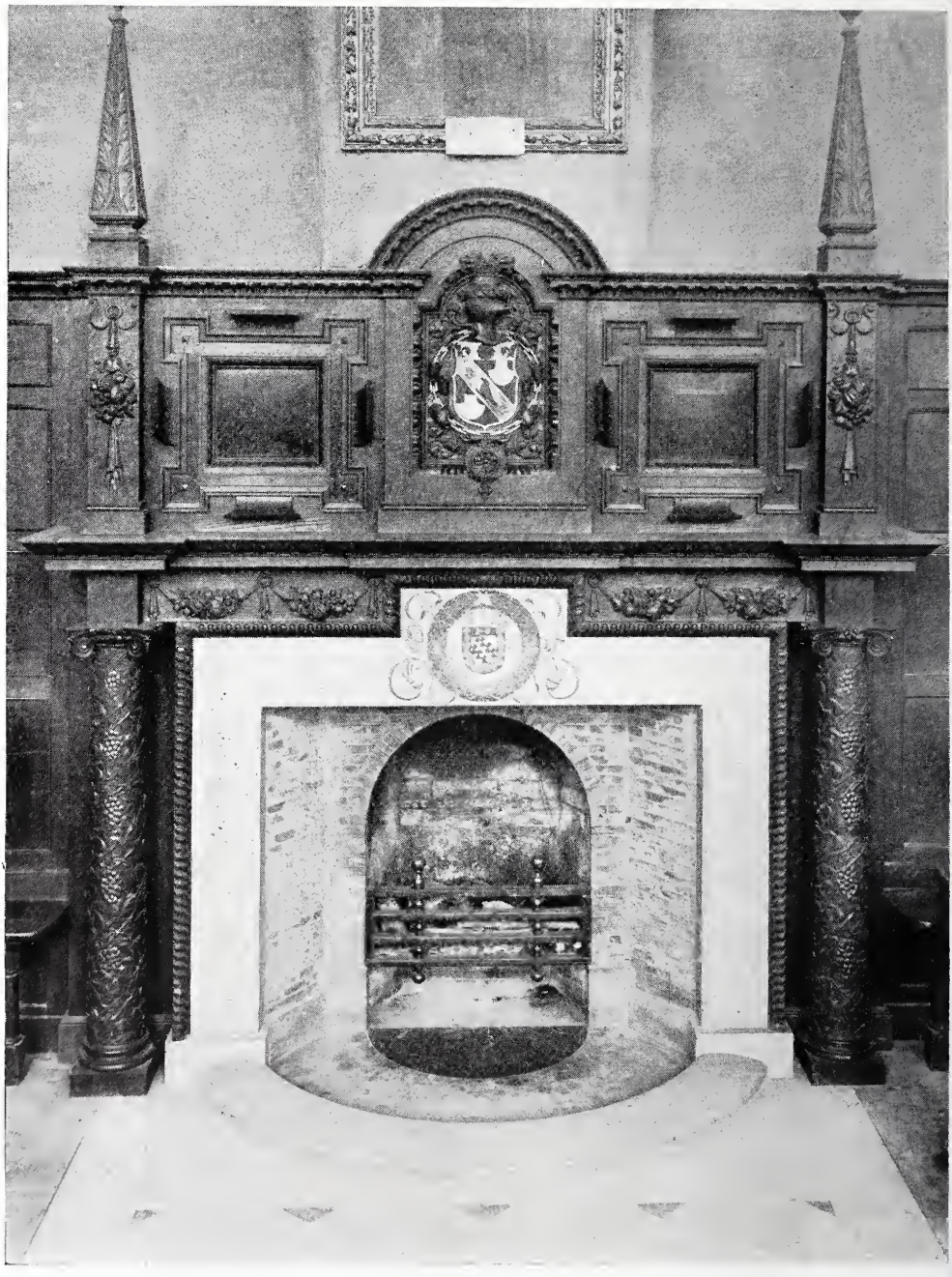
pure illumination. Roofs are tinted to a light reddish tone; delicate and minute touches of brilliant color enliven costumes and trappings. The figures are indicated with great spirit.

THE FORTRESS OF THE ALHAMBRA.

Were this lithograph better known, it might be awarded a place among masterpieces. An incredible sense of vastness is conveyed by subtlety of tone, though, curiously enough, it is deficient in that atmospheric quality which we associate with remote horizons. The proofs possess qualities which are not transmissible in any medium but lithography, and which no process of mechanical reproduction can retail to us; the photograph and the halftone are totally inadequate and very disappointing to one who has studied the originals at the New York or the Avery library, where excellent impressions may be seen. In this great composition, realism has paid handsome tribute to pictorial effect; a dramatic moment of nature is recorded in its velvety tones. The power of this work should shake the faith of those who regard nature as the final court of appeal. It is the poet's conception of a grandiose subject, through which the painter scatters rays of sunlight like jewels, with lavish hand.



THE FORTRESS OF THE ALHAMBRA.



FIREPLACE WITH OVERMANTEL IN HALL—EXETER COLLEGE, OXFORD. MODERN JACOBEAN.

English Architectural Decoration

Text and Measured Drawings by Albert E. Bullock

Part X.—Overmantels and Mirrors

HAVING dealt with various types of chimneypieces in the last two articles, some account and description of overmantels and mirrors will doubtless prove of interest.

The transition between late seventeenth and early eighteenth century mantels appears to be exemplified in the illustration of an example from an old house at Hertford, which will be noticed to have a heavily molded architrave; the frieze is ornamented at the extreme ends and in the centre, and the cornice has carved acanthus leaf similar to the bed molds of the main cornices to rooms of the preceding era.

In Jacobean times the overmantel was designed with and formed part of the chimneypiece, which was invariably made the full height of the room when paneled, or to the frieze level when plastered above the capping. These fireplaces were frequently of two orders, superincumbent, having single, double or triple columns supporting the entablature to the overmantel or upper portion, with one exception, viz., the Jerusalem Chamber, Westminster Abbey, which has three orders in the tier, the whole chimneypiece being carved in cedar, a very exceptional wood to use at this time when oak, stone and marble were the most usual materials in vogue. At Hatfield House, marble is the chief medium, having polished insets of precious marbles in jewel formation, while instances exist of stone architraves, lintels and friezes combined with oak carved overmantels, as at the old Palace of Bromley-by-Bow.

During the reign of Charles I this principle of combining the overmantel with the fire mantel still obtained, as at Wilton and many other edifices designed by Inigo Jones. John Webb seems to have adopted the lower order in several instances, while in the Wren period panels and carved frames were often resorted to with the object of providing space for oil paintings.

Mirrors were not adopted to any extent until the end of the seventeenth century, the beveled crown glass being distinct from the modern British rolled plate in two particulars—namely, the obtuse angle of the level in old examples and the irregularity of the thickness of the sheet due to spinning.

The illustrations given show a Chippendale period room from Sudbury, Suffolk; a small pier mirror of the Chippendale era compared with a walnut and gilt mirror of late William and Mary or Queen Anne period and an Italian type of mirror. The negligé character of the two smaller mirrors compare favorably with the stateliness of the gilt walnut example, which at this early date (post 1700) exhibits the French influence in the carved border members. This originated with Jean Baptiste Pineau (1652-1715) who, with Boffrand and de Cotte, created the style Régence at Versailles. The style is sumptuously shown in the beautiful wood carving of the Petit Salon at the Château de Rambouillet. Had the English Joiners, in following this style, not been satisfied with the few details they represented *ad nauseum,* they could have developed a much more lasting style with a flow of invention as generous as is exhibited at the Salon de la Princesse Soubèse.

Very bold carving obtained during the reign of Charles II and until the middle of the eighteenth century when the Chippendale era flourished, after which a quieter tone prevailed with the Adam Brothers, for whom the younger Chippendale worked in conjunction with Pergolesi, C. Richardson, the designer, and

various marble and stucco workers, including Rose, Spang and Van Gelder.

The mirrors of the late seventeenth century were not always beveled, although beveling of clear glass for windows was adopted both at Hampton Court Palace and Chatsworth.

Owing to the early glass being spun and not cast or rolled, as at present, irregularities of the surface are more patent by which it can be detected, being a criterion for its originality, but the silvering, suffering from age and damp, will frequently be found to have been renewed.

Many of the early frame carvings were intended for oil paintings, but were converted into mirrors subsequently, the transformation of the inset enhancing the value of the carving. A variety of treatments were attempted besides gilding. Tortoise shell and mahogany; walnut with gilt moldings; dark carved oak; ornamental glass framing of Venetian type, and, in the Adam era, the convex circular mirrors invariably had an ebony hued inner molding edging the mirror to throw up the large gilt molding forming the frame.

Large sizes in glass not always being obtainable, the joiner had recourse to the subterfuge of subdividing the horizonal mirrors or putting an openwork edging and glazing around the main glass in smaller pieces. This naturally led to the introduction of colored glass at the edges in some instances, which, however, was of short life.

The process of inlaying the overmantel panels in geometrical designs and star patterns occurred in the latter half of the seventeenth century and is a feature of some of Watson's work at Chatsworth. The carvings upon the surround were thus subservient to the ornamental flush interior treatment of the panel surface.

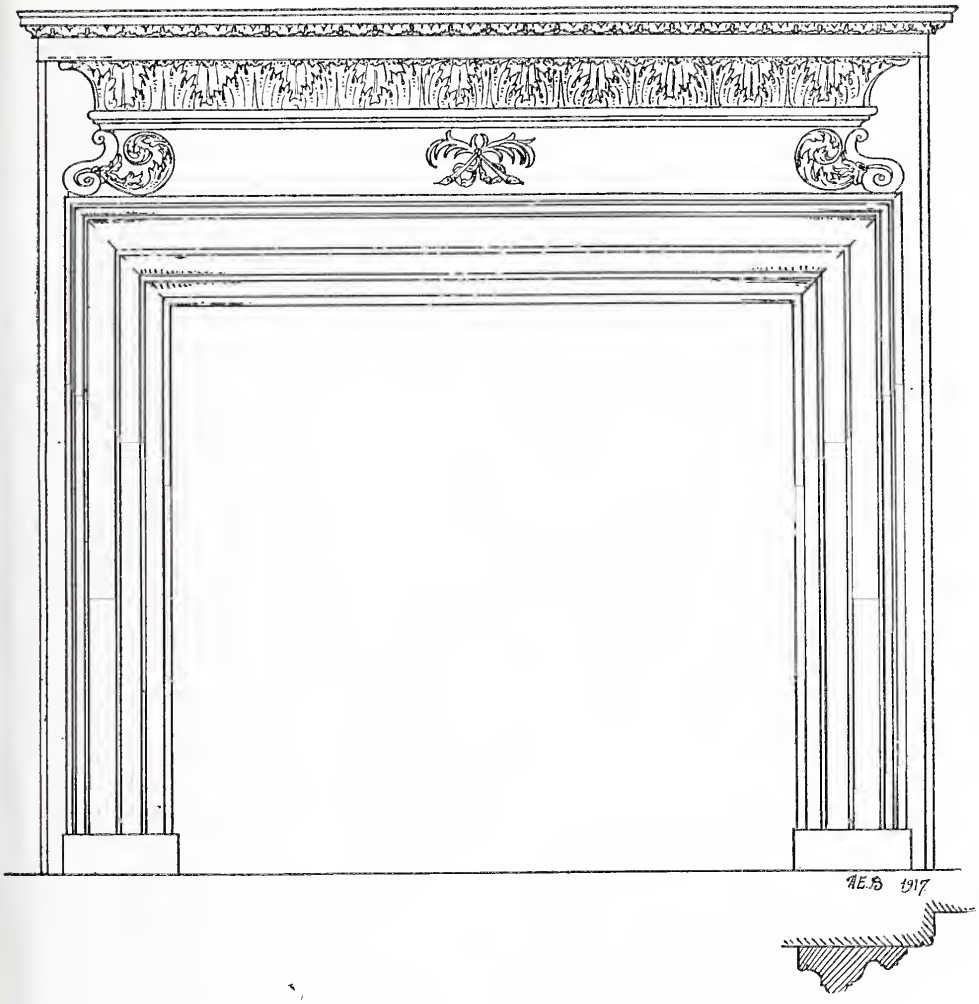
The method of giving a texture to a plain surface in wood was of Jacobean origin and is to be seen in the panels of the Sizergh Castle Room from Westmoreland, where several different veneer hardwoods are employed in the inlay. Even the columns to chimneypiece overmantels of this period occasionally exhibit spiral designs, being made up of closely compressed hard wood shavings, which when polished are very effective.

With James Gibbs a high grade of carving developed for interiors and considerable skill was displayed in the disposition of ornament to mantels, over doors, etc., with carved cartouches of the character of the Rysbrack sculpture.

Most of the architects of the eighteenth century designed mural tablets and cenotaphs for various churches and cathedrals, of which Westminster Abbey is the happy possessor of some of the most famous examples. William Kent designed the framing for Scheemaker's "Shakespeare" in 1740; James Gibbs designed the monument to Katharine Bovey, which was probably carved by Rysbrack, the sculptor of the tomb to Matthew Prior in the Poets' Corner of Westminster Abbey. Read carved monuments for Robert Adam, whose style was followed by Richard Hayward, Bacon, Eckstein and others of contemporary date. Cheere favored the French motifs of Chippendale's time, which are not a little florid for a sacred edifice.

The principal architects of the century, in addition to those above mentioned, were Edward Tufnell, Hawksmoor, Ripley, Payne, Sir John Vanbrugh, Colin Campbell, Sir William Chambers and Sir John Soane, with many of the lesser lights who flourished in the provinces working upon the principles in vogue in their eras.

The artisans employed are not often recorded except where the accounts were kept of the more monumental buildings, as Chatsworth, Hampton Court Palace, etc. A joiner by the name of Gibbons was employed by Inigo Jones and Webb on staircases. Samuel Watson and his son spent forty years at Chatsworth with several assistants, working to the designs of William Talman, who had previously been associated with Sir Christopher Wren at Hampton Court Palace, where the fine work of Grinling Gibbons and his assistants, Selden and others, are so much in evidence. James Gibbs employed a carpenter and joiner named John Phillips at the Radcliffe Library,



CHIMNEYPIECE FROM AN OLD HOUSE IN HERTFORD, HERTS.

Oxford, the two Townsends, Lionel and William Smith of Warwick, as masons and carvers, with the Italian plasterer Artari and the famous sculptor Michael Rysbrack, who had previously worked for William Kent.

By the middle of the century joinery became a prominent and artistic business, which increased in power and notoriety with each succeeding decade. We have at any rate more detailed information of the ability of the artisans from articles which remain and the published works of current practice, with some records of the personality of many of the more famous joiners who based their work upon the fine walnut type of the William and Mary period.

The influence of the work of Sir John Vanbrugh had a very definite result, as had the building of Montagu House, which was decorated by Monnoyer and Rousseau under the direction of de la Fosse. The publication of designs by Daniel Marot, who had worked with Bérain for André Charles Boule, the work of the Caffieri family, the Adam family and many others of Louis XIV's time, all tended to inculcate fresh ideas to the art of the age.

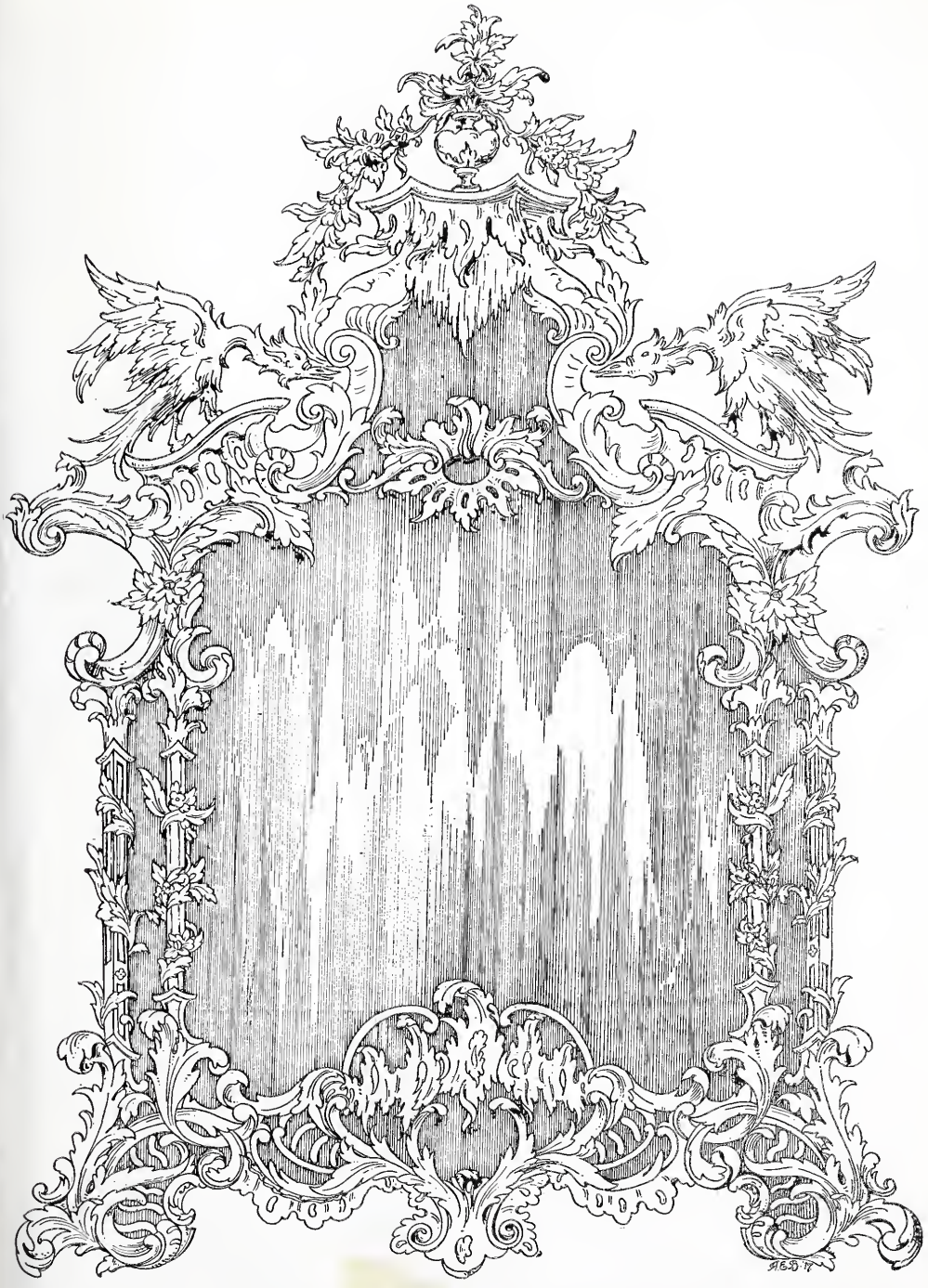
Chippendale was naturally influenced by the Continental movement, as well as by the publications of the many volumes of designs and ornament by Cauvet, Marot and several English works, which induced him to publish the "Gentleman and Cabinet Makers' Director," when Edwards and Darley brought out their "Chinese Designs" in 1754.

The severity of the style adopted during the reign of George II did not appeal to Chippendale, who wanted freedom for his chisel, and saw his opportunity in a combination of Chinese with Louis XIV detail. The type of carving and design which will always be associated with him is exemplified by a drawing I have made from a rough sketch of a mirror from Highgate and the photograph of a fine mirror from Aston Hall, Birmingham. Were it not for the brackets and certain French elements I would place this latter example as pre-Chippendale, it has almost a William and Mary touch. Compare this with the carved mahogany frame from the Woodwork Section of the Victoria and Albert Museum, and it will be noticed that the example is of a much bolder nature, and, being in mahogany, would be later, since walnut was the chief medium of Chippendale. There is another example of fine carved scroll work recently in my possession, which is, I believe, in oak, but of very dark hue, almost black in appearance. It is difficult to date, but is somewhat characteristic of the late Wren period.

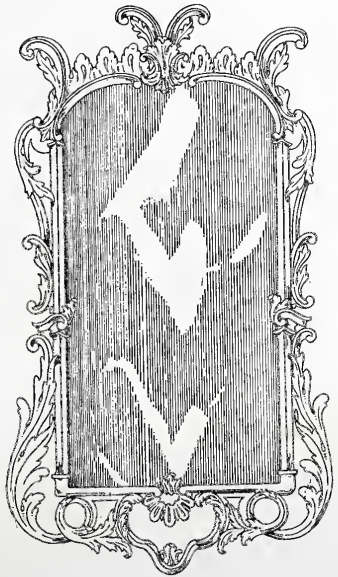
With the Adam work, as has already been indicated, mirrors took various forms, and the modern copyists are legion, because with slight modification they are very adaptable to light drawing room decorations, being circular with convex mirror, oval and rectangular, some of the latter shape having glazed paneled borders. The tops are usually ornamented with carving of Grecian or Egyptian period ornament, of which the favorite motifs were sphinxes, lions, eagles and rams' heads, these being easily stereotyped.

Modern copies of triple oval form joined together by festoons of beads or husk ornament, the centre oval being the largest of the three, are not uncommon. Early Tudor examples were small, with a glass hardly exceeding a foot by nine inches, with wide needlework bordered surround in a narrow tortoiseshell frame. The Georgian examples were usually gilt, with pilasters and pediments—that is to say of George II's time. Between this period and the Chippendale era there were variations of oblong mirrors subdivided into three or more panels, sometimes having a painting in the top half with the subdivided beveled mirrors below, the frame being of gilt wood with angles broken and mitered to take rosettes at the corners. In these examples the scallop shell was not an unusual feature and the top was frequently treated with carved ornament.

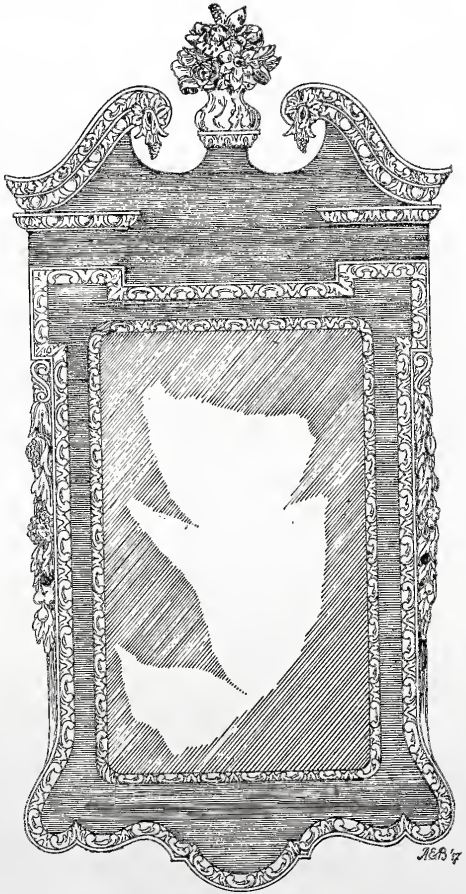
With Adam examples the addition of bracket candle holders became a common practice where sconces were not used, the light being reflected by the mirror. These were very tastefully designed, but often



GILT CHIPPENDALE MIRROR (HIGHGATE), SIX FEET SIX INCHES BY FOUR FEET THREE INCHES OVER ALL. ABOUT 1750.



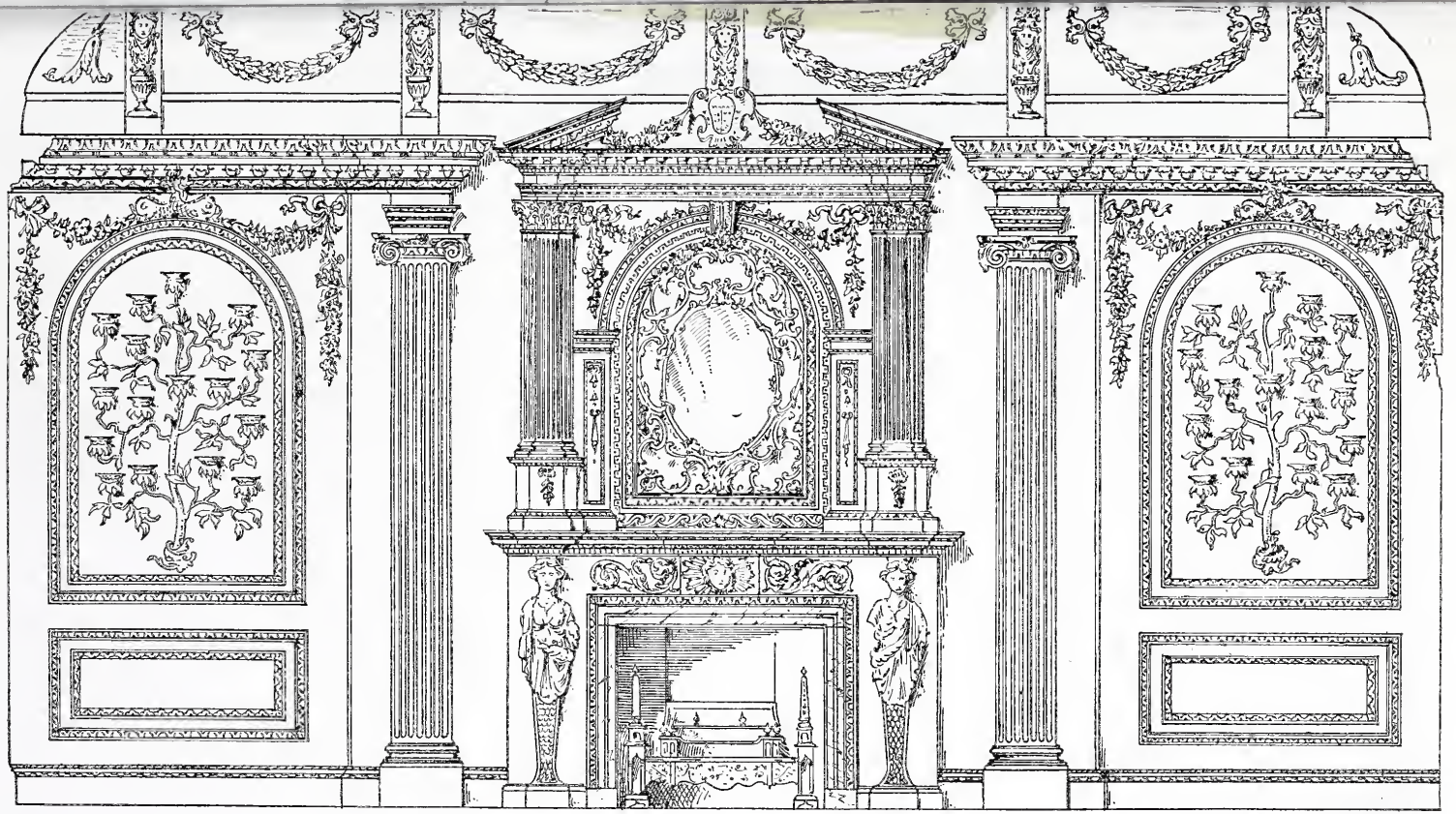
CHIPPENDALE PERIOD
GILT PIER MIRROR



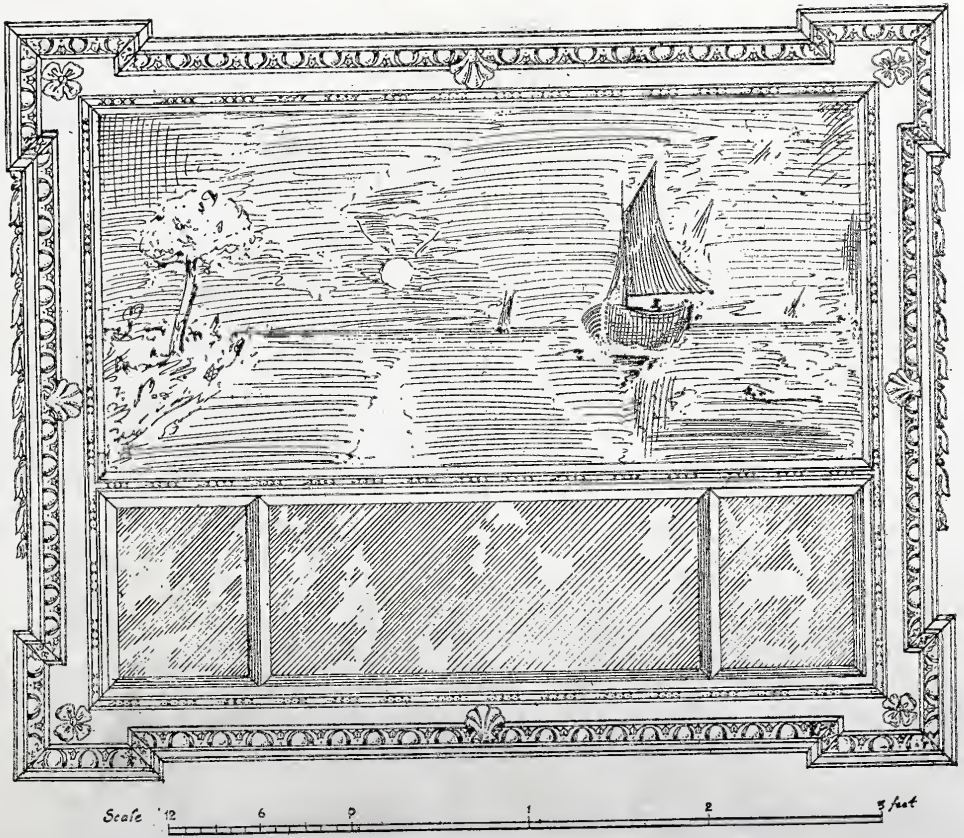
QVEEN ANNE PIER MIRROR
WALNVT WITH GILT MOLDINGS.



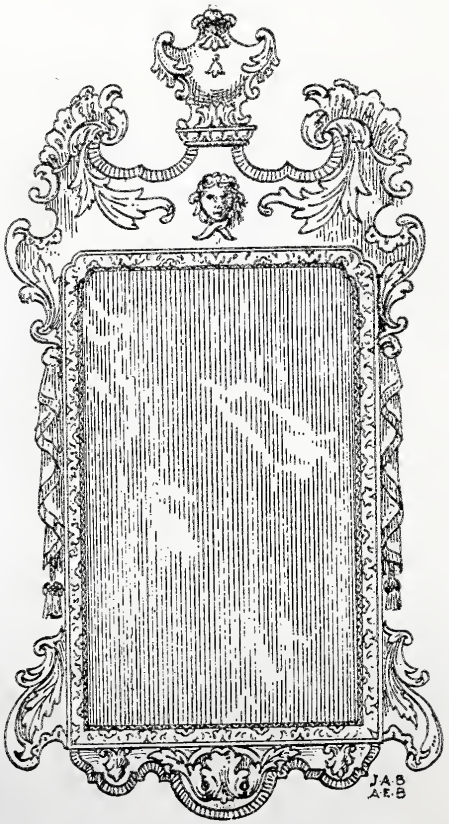
ITALIAN TYPE of GILT -
MIRROR WITH OPEN BORDER.



SIDE OF A CHIPPENDALE ROOM FROM SUDBURY, SUFFOLK.

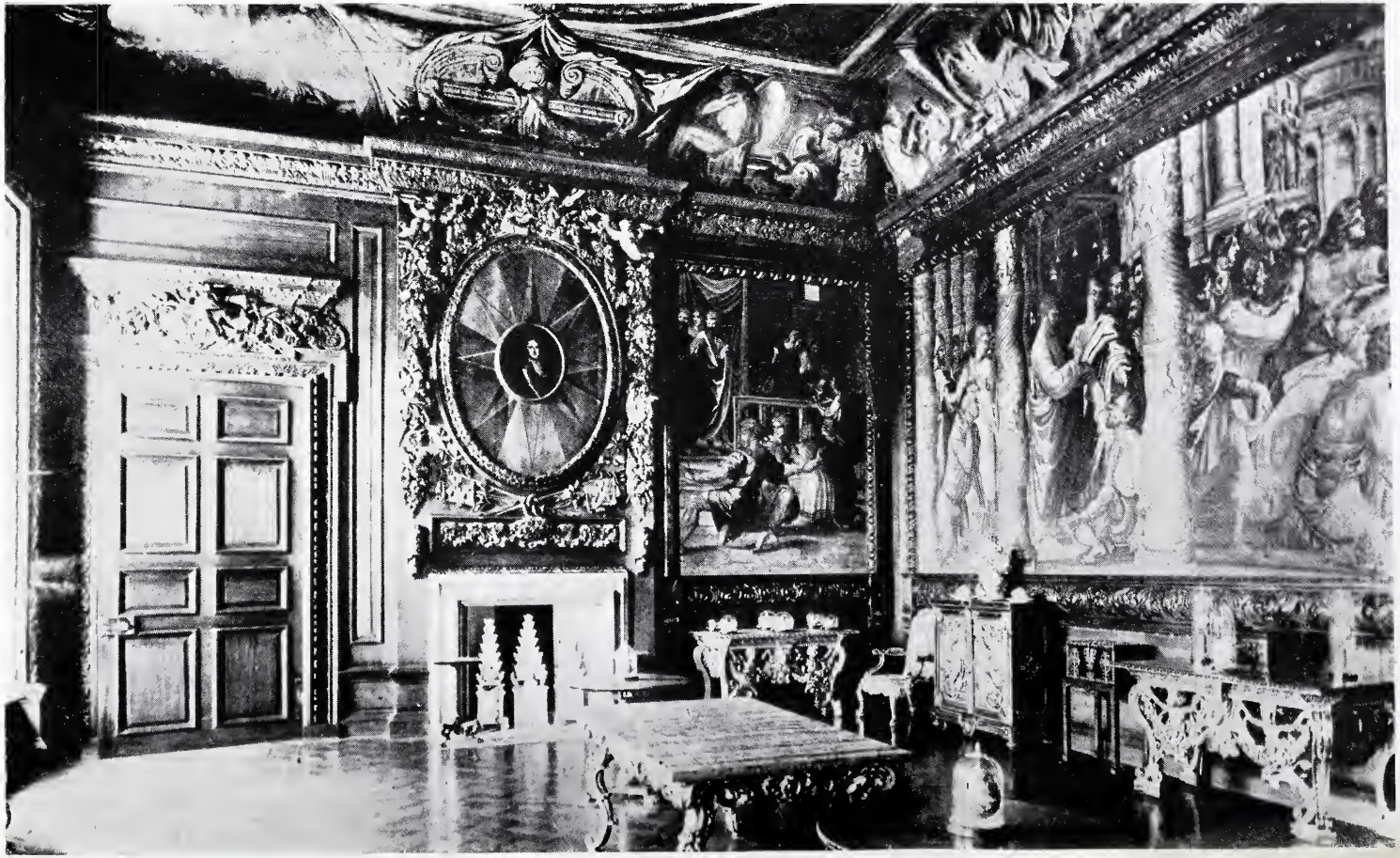


MID-GEORGIAN CARVED & GILT

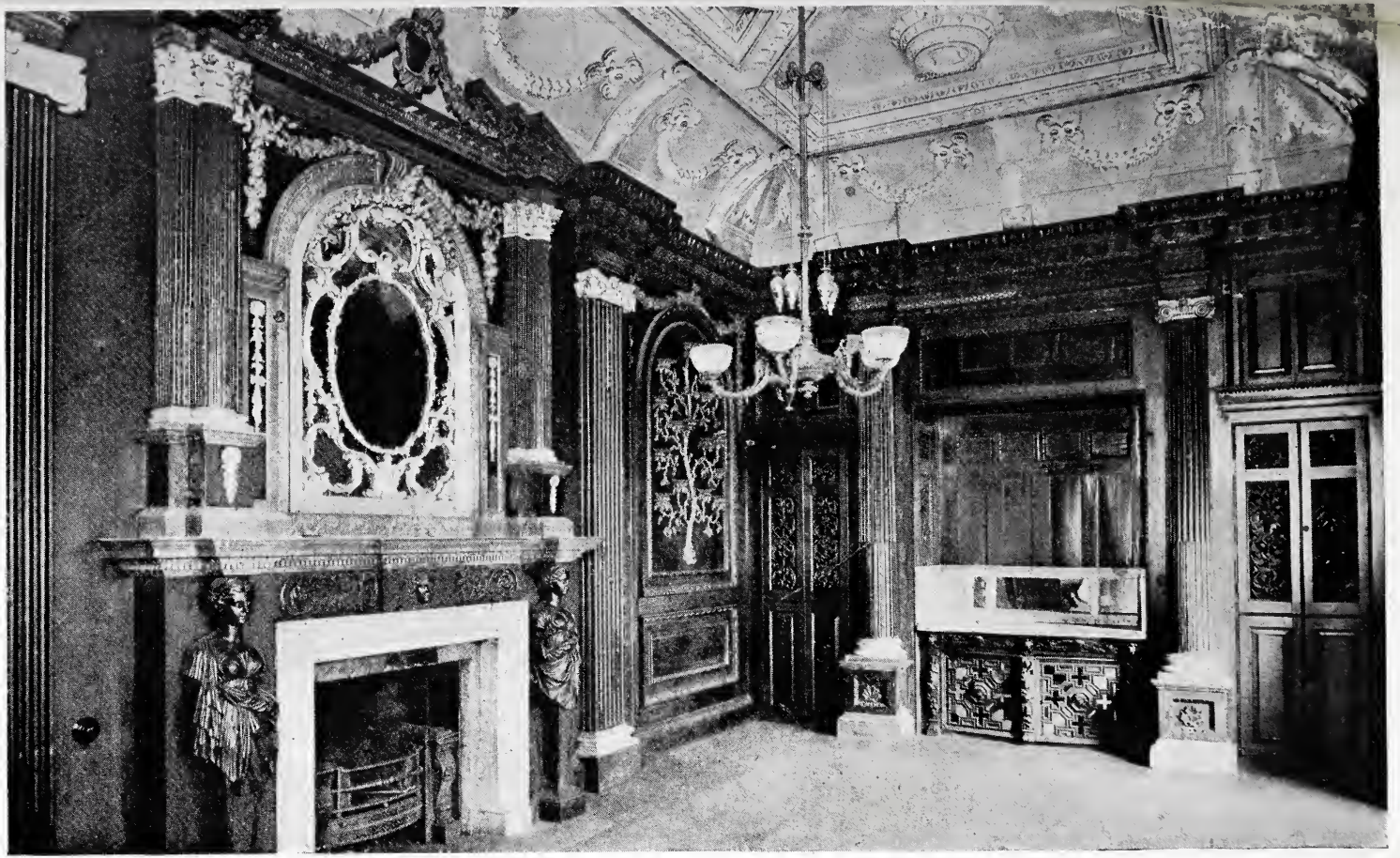


GILT MIRROR SHEWING

CURRENDALE INFLUENCE



OVAL OVERMANTEL IN STATE ROOM AT CHATSWORTH, SURREY. THE DUKE OF DEVONSHIRE.



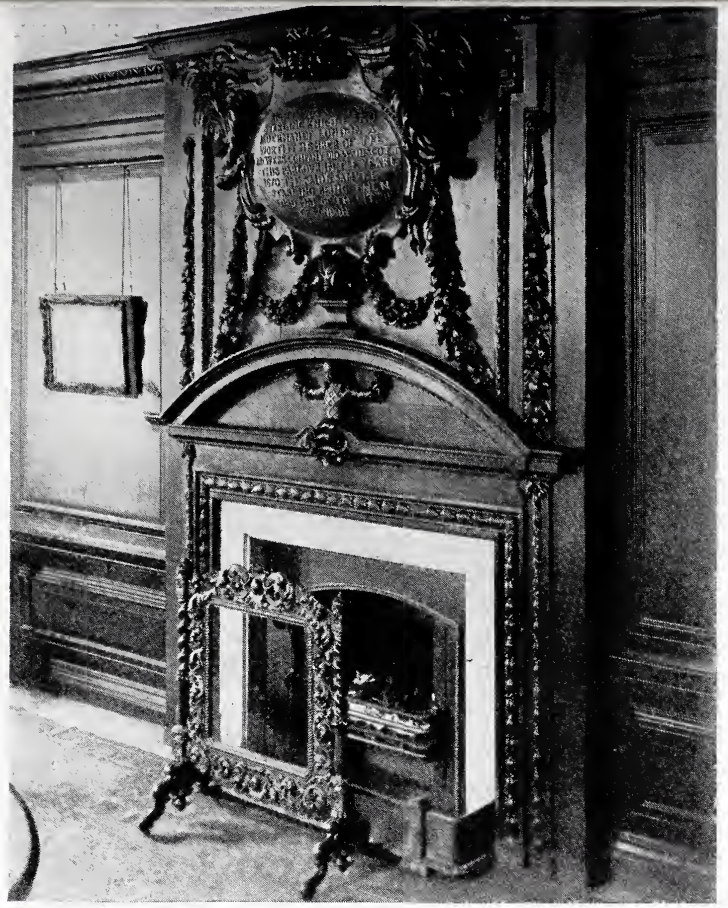
CHIPPENDALE ROOM FROM SUDBURY. NOW IN AMERICA.



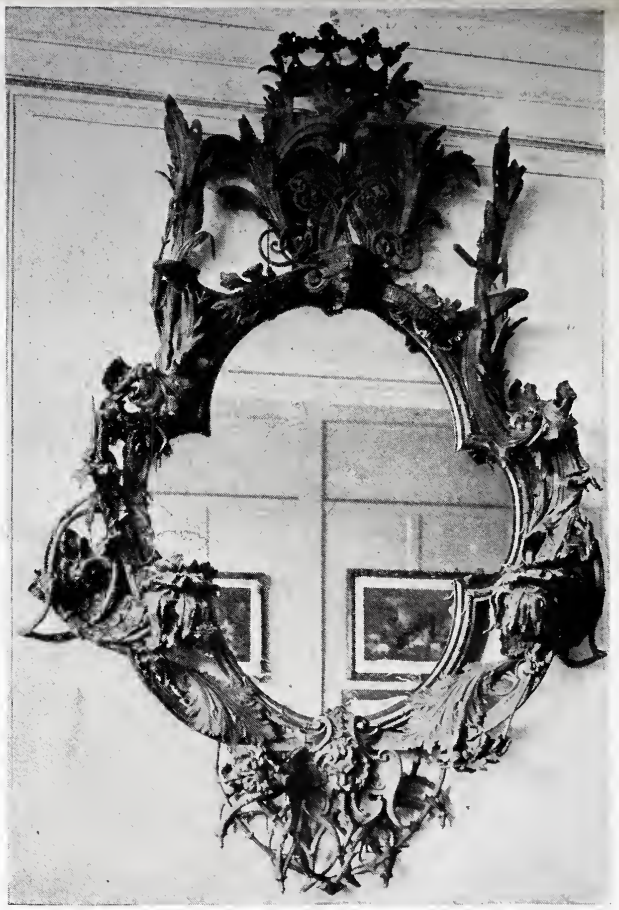
CARVED OAK MIRROR OF WREN TYPE. RECENTLY IN MR. BULLOCK'S POSSESSION.



CARVED MAHOGANY FRAME IN VICTORIA AND ALBERT MUSEUM.
Photo by C. Ford Glover



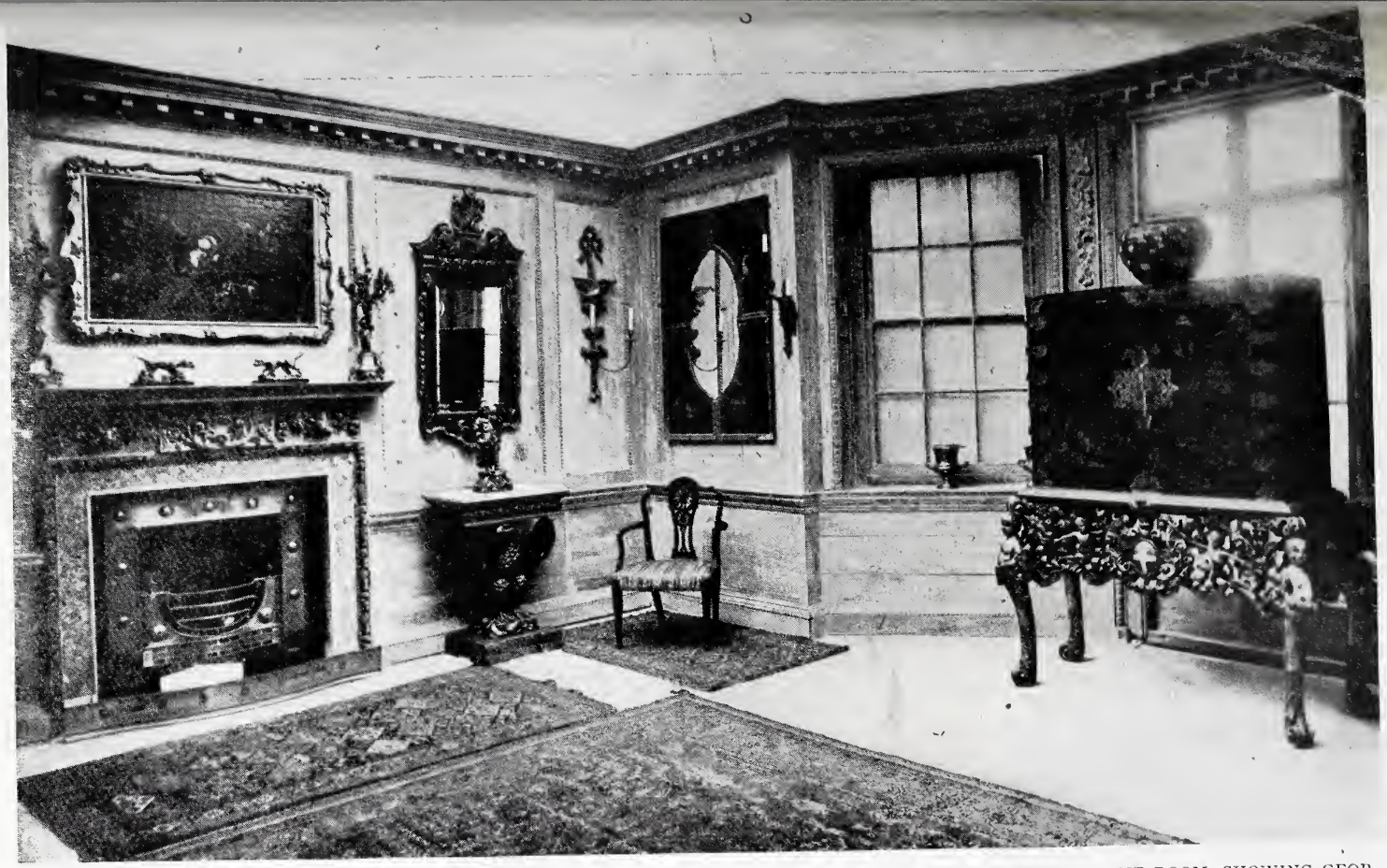
CHIMNEYPIECE IN BOARD ROOM—BREWER'S HALL, LONDON, 1670



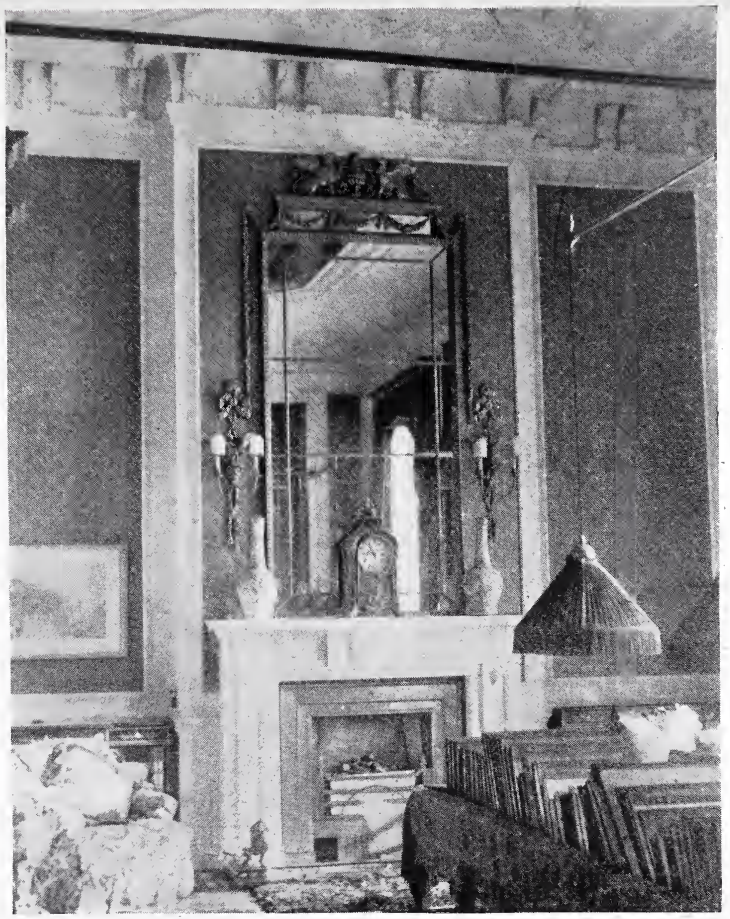
MIRROR IN DR. JOHNSON'S ROOM, CHIPPENDALE PERIOD—ASTON HALL, BIRMINGHAM.



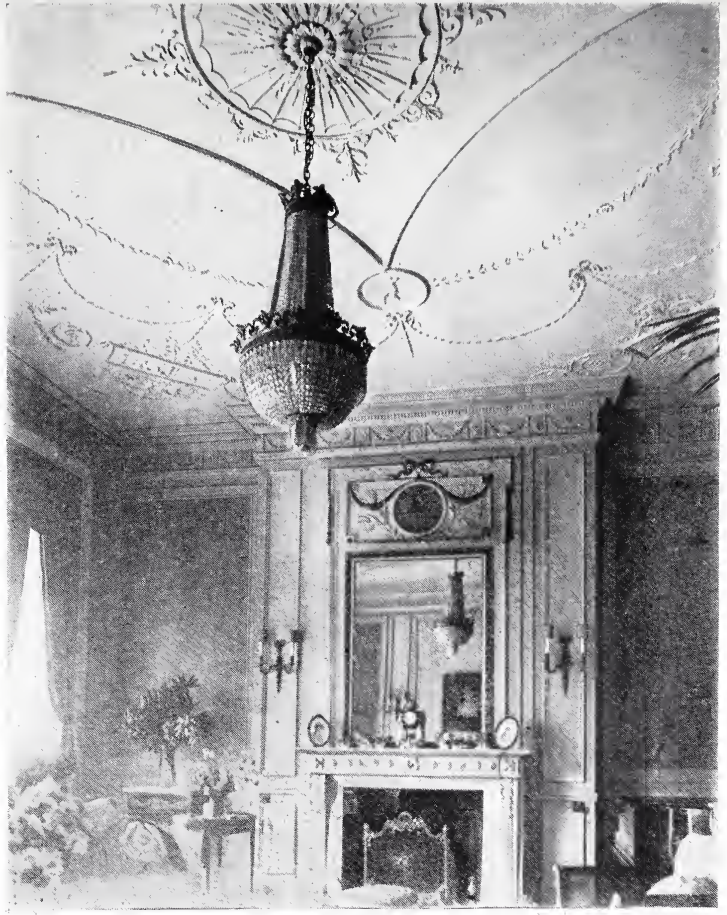
HALL—ALL SOULS COLLEGE, OXFORD,
SHOWING CARVED PICTURE



MID-EIGHTEENTH CENTURY PINE ROOM, SHOWING GEORGIAN MIRROR WITH CONVENTIONAL PRINCE OF WALES FEATHERS AS CREST. QUEEN ANNE PERIOD INFLUENCE.



TYPE OF ADAM PERIOD MIRROR.
Photo lent by Mr. I. Goodison.



MODERN ANGLO-FRENCH TYPE OF DECORATION.

of too delicate construction to be permanent. The designers of the period spent much time and ingenuity in the development and manufacture of brass and silver plated candlesticks or ornamental sconces and candelabra of wood and metal, the former frequently being painted in green and gold tints or colors. For these lights the tallow chandlers cast ornamental wax candles in special molds, which must have been very effective, even if the light was dim as compared with modern usage.

The modeling of Pergolesi was less formal than the sterner Grecian manner of pure Adam work, although the main lines followed the general theme of this period. He was more lavish with his floral embellishments, which possess a naturalistic character in the leafage attached to the scroll work, the effect being both graceful and decorative.

During the reign of Charles II until the advent of James II carving was free and bold, of designs frequently descriptive of definite objects concerned with the building or room so treated. This is especially noticeable in the halls and board rooms of the Livery Companies of London. For instance, in the Brewers' Hall, Addle Street, in the City of London, the hall screen is surmounted by amorini astride beer barrels, while in the board room the chimneypiece and overmantel have hops, wheat and sheaves introduced into the detail of the carved ornament. The carving of the fire screen is seen in the photograph to be of bold character and of tasteful design.

A similar idea is exhibited in the Weavers' Hall at Exeter, where the various tools and instruments used in the processes are carved in the oak paneling. This principle has an historical value quite apart from the archeological interest it gives, and forms an original basis of operation for the designer.

Fire screens were occasionally included within the purview of the joiners providing the wainscoting, in which case some very fine examples are to be seen.

Where mirrors and frames were not provided plaster relief plaques were usual and were employed by the Adam Brothers, Richardson and others. They were not necessarily connected to the mantelpiece, but were frequently part of the general decorative scheme of the room.

Tastefully designed mirrors, whether placed centrally over the fireplace, used as pier glasses, or embodied in the framing of a door to obtain vistas through a series of rooms, rarely fail to enhance the general effect of an apartment, adding a lustre and brightness befitting a well designed interior. They reflect the pattern of the ceiling, the furniture and walls, and by their peculiar virtue reduce the scale to a proportionate value that is coincident with the dimensions of the room.

The ARTISTIC TREATMENT OF CONCRETE SURFACES

By

H. VANDERVOORT WALSH

CONCRETE is coming into its own as an all around building material. Its progress to this point has been slow, for it was considered to be a purely structural material, too ugly to leave uncovered. Since the days of the Romans it has been used for mass work, but under cover of some other material that hid its grey, monotonous surface. Far more attention has been given to the development of the structural strength of concrete than to its artistic surface treatment, because it was taken for granted that it was hopelessly ugly. The engineer has devoted much time to reinforced concrete, but the architect has not given the same attention to its possible finishes.

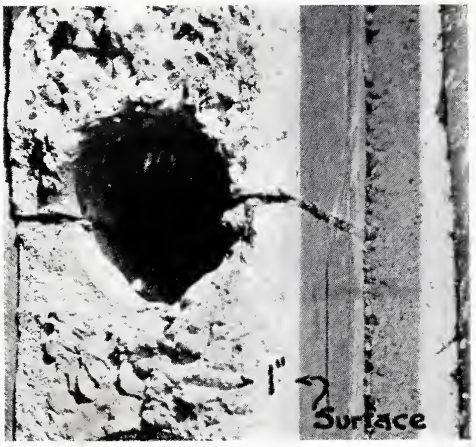
It is not difficult to see why this indifference has been shown towards the development of the artistic use of concrete, for the average concrete wall that remains uncovered presents a surface without texture or color. When the forms are removed from concrete, the surface bears their imprint, and if they were made of rough boards, the concrete has the appearance of a poorly constructed fence, painted with a dull grey, mudlike paint. On the other hand, if the surface has been troweled smooth, there is no texture or sparkle. It has in both cases a dull, pasty, dead surface. In time this develops hair-cracks into which the dirt of the air lodges, giving the realistic effect of dead skin. Often the surface is seen to peal away in thin scales as if it were suffering from some disease, and after each rain storm a very dark water stain develops as if it were bruised, although it may not have absorbed as much moisture as the ordinary wall of brick or stone. Nor does it mellow with age, but crackles under the heat of time.

To the observing person this is no exaggeration. Particularly ugly have been the concrete blocks, manufactured by machines to resemble stones with quarry cut faces.

However, in recent years artificial stone makers have developed notably satisfactory methods of surfacing concrete. Under many commercial names concrete is now manufactured into building units of beauty, possessing much of the charm and appeal of our natural building stones; and the designer is in a position to obtain concrete surfaces as interesting as any, provided the principles back of the art are known.

These principles may be classified into three distinct groups which are however intimately linked together. First of all, some mechanical means must be used to produce variety of texture, either by making a surface which is pitted to give valley shadows and peaks of high-lights, or by securing the same effect with a peppering of light and dark aggregates. Secondly, the color must avoid the dead greys by using whites, creams or rich warm tones, eliminating all colors which give a dry, thirsty appearance to the wall. Thirdly, the surface must be damp-proof or colored in such a way that rain water will not make large patches of dark, damp stains.

The mechanical operations necessary are varied, but certain well tried processes can be followed for securing original effects. The earliest and best known treatments for producing surface texture are those which have been developed as applied coatings. The concrete is molded



Economy Is Secured by Casting the Surface Material As an Integral Part of the Block.

in the usual way, and then a stucco is spread over the top of it in which texture is developed by pitting, casting and dashing. Many beautiful effects are possible with these treatments, but they are not the true solutions. The right method is in its infancy, and consists in securing texture and color by exposing the beauty of the aggregate with which the concrete has been made by removing the surface skin deposited from the forms.

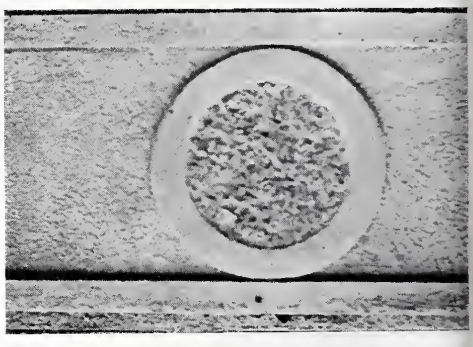
The first class of surface treatments includes stippling, sand-floating, sand-spraying, rough-casting, pebble-dashing and mosaic inlaying. All of these secure texture by application of stucco over the surface left by the forms and may be called the "over-coat" methods. The first four secure texture by some means of roughening the surface into pits and peaks. The last two secure texture by impressing aggregates into the surface or by peppering the same with dark and light aggregates.



An Over-Coat Finish Called Sand-Sprayed. It Gives a Finer Texture Than Rough-Casting.

The stippled surface is made by applying a coat of stucco to the concrete and then roughening it with pats from a brush of broom straw. The texture secured is but a slight improvement over the smooth, trowelled one, and is very monotonous when viewed from a distance, especially when gray cement is used. White cement and white sand improve the appearance greatly, since the shadows of the rough pits and the highlights of the projections are in more contrast.

The sand-float finish is not much better, but it is another mechanical method of securing a fine texture which appears best when light stucco is used. The applied stucco is rubbed with a wooden float in a circular motion, and sand is spattered under it to give a roughening action.



Interior of Circle Is Pebble Dash; Rim of Circle Troweled and Body Surface Sand-Floated.

The sand-sprayed finish is the thinnest treatment. Over the surface of the concrete, which should be green from the molds, is spattered, with a whisk broom, a creamy mixture of cement and white sand. This should be mixed fresh every thirty minutes and kept well stirred. However, even this may develop a monotonous appearance, since a thin film of cement covers the sand particles and hides any sparkle from them.

The rough-coat surfacing is the most rugged of all, and presents a great vari-



An Over-Coat Finish Called Rough-Casting, Which Gives the Coarsest Texture.

ety of heavy spots of shade and light. This can bear the use of grey cement the best, but the effect is enhanced by the use of white cement. A mixture of one part of cement to two parts of sand is thrown on by hand against the wall. If great care is not observed, a patchy appearance may result by having certain areas very rough and others comparatively smooth.

The pebble dash finish secures variety of color with variety of texture, and is the most pleasing of the "over-coat" methods of concrete surfacing. Pebbles or chipped aggregate varying in size from one-quarter to one-half inch are wetted and thrown forcibly against the troweled coating of stucco. It makes possible the use of great varieties of colored aggregate. Those which have sparkling quartz particles or broken bits of crystalline marble or black pieces of slag or other brilliant materials produce the most pleasing results. Such aggregates reflect the sunshine in sparkling points of light and give that life to the surface which we admire so much in nature's products, especially in the granites and marbles. The use in this country of a base coat of cement and sand into which the pebbles are thrown is not nearly so satisfactory as the use of a base of neat white cement. This is the English practice and when the aggregate is thrown into this pure cement it will stick as long as the wall stands, while the use of a sand mortar as a base does not offer the same power of adhesion, resulting in patchy work. Some workmen pat the pebbles with a wooden paddle into the base, after they have been thrown on. This gives the most durable surface. However, this finish requires skill, for the average workman will not spread the pebbles evenly over the surface.



Mosaic Inlay With Glass of Various Colors. The Surface Is Plane, White Cement Filling the Crevices Between the Pieces of Glass.



Tile Mosaic Inlay.

The mosaic-inlay is practically the same, only the materials impressed into the cement base are arranged with individual care. It is best suited to some design or panel decoration. Colored tile, broken colored glass, glass beads and materials of this character are used to great effect. It is surprising what beautiful effects broken bottle glass will produce, if it is handled with taste. Children's colored beads, when imbedded to a flush surface, make a wonderfully intricate texture. The great secret of success lies in keeping the surface absolutely plane, with all crevices between particles filled in flush with white cement.

However, the most effective results in concrete surfacing are obtained by the second class of treatments in which the skin of the surface is removed by some mechanical means, exposing the texture of the aggregates of which the concrete is made. When the forms are removed from concrete, the surface is covered with a thin film of cement, and if there are any sparkling aggregates used in its make-up, they will be invisible under this skin. It is this film which gives the dull, gray, lifeless effect to concrete, and it is also in this skin that the ugly hair-cracks develop. When it is removed the true beauty of the concrete is exposed. By mixing selected aggregates, as marbles, granites, pebbles and glass in the concrete, they can be exposed to the surface by scrubbing, spraying, cutting with stone cutting tools and machines. The concrete may be made of the usual grey cement and cheap aggregate, but in the casting the selected mixture of surfacing material may be spread over the exterior in a thin layer of one inch. However, this is more a point of economy than one of surfacing.

To finish by scrubbing, the concrete sould be allowed to set for at least twenty-four hours. Then with water and a stiff brush, the film of cement can be scrubbed off, exposing the aggregate in all its beauty. If the cement in any one part is too hard, it can be removed by a solution of one part muriatic acid and four parts water, provided that this is carefully washed off afterwards. This treatment is the crudest of this class, but it has many advantages.



Surface Background Consists of Children's Beads Imbedded Flush With the Surface.

Another way to expose the aggregate is to clean the concrete with a fine spray such as the fruit growers use. This should be done immediately after removing the forms, but it requires skill to prevent the softening of the surface by too much water. A very beautiful mottled effect is secured in this way.

However, the best effects are obtained when some type of stone cutting tool is used. The concrete is cast in the usual way, and when it is removed from the molds the skin is removed by finishing it with the tools that are employed by the stone cutter.

One of the most beautiful effects obtainable is to cast white cement with white marble aggregate into blocks and then, when these are still in the green state, pitch off the face exactly as is done in giving a quarry face to a natural stone. The split of the concrete will follow the most sparkling lines of the imbedded aggregate and an appearance rivaling the best stone is produced.



Corner Blocks Are Finished in the Same Way That Stones Are Quarry Faced. The Others Are Finished With the Pointer.

Another surface of great charm is secured by the pointer. With a pneumatic hammer behind this tool, the surface can be gone over quickly. The results are quite beyond description in photographs, for there are few stones which present a finer appearance, if the aggregate has been carefully selected.

The use of the tooth chisel, the bush chisel and the cross chisel operated in the pneumatic hammer make other varieties of surfaces

which have their own characteristics. Concrete can also be treated with revolving drums of carborundum to wear off the surface skin.

With the right kind of hard crystalline aggregate, concrete can be polished by the methods used for stones. When this is done, no colors should be used, for they darken too much under the action of the polisher.

In all of these treatments the operation of cutting the surface is comparatively simple, since it is done before the concrete has become entirely hardened, although the harder it is, the more brilliant will be the surface produced by the cutting tools. Another great advantage lies in the fact that if any corner or part is broken off, the use of a patch will mend it without weakening its durability. Economy of modeling is another feature, for designs which ordinarily must be cut from blocks of stone are easily cast in concrete, and the only tooling required is for the surface. Designs of extreme cost for cut stone, such as perforated balustrades, can be produced at comparatively low cost in concrete.



Combination of Smooth Surface Finished With Carborundum Blocks, Pointed Surface, Pebble Dash and Simple Casting Details.

Next to texture comes the coloring of concrete. Nature has provided us with great varieties of colored granites, marbles, sandstones and gravel which make excellent aggregate for coloring. In fact the coloring of the concrete by aggregates is the most durable method. Beautiful pink, red, yellow and dark green granites can be had from the waste products of the granite quarries. Marble waste can be secured in yellow, green, red, pink, white and multi-colors. Sandstones can be had in buffs and reds. Gravels run in blacks, yellows and whites. By a careful combination of white marble, black slag and grey cement a very perfect imitation of granite can be made, in fact such a granite is made by one firm selling its products all over the United States.

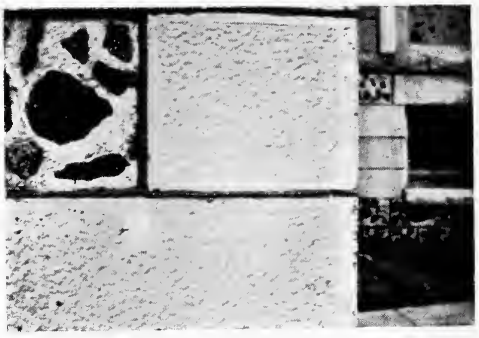
However, mineral colors can be secured which will offer resistance to time. They must be of the highest degree of purity. True mineral colors will stand the acid washing and action of cement and time. No colors should be used which leave water permanently tinted when shaken up with it. It is best to use a mere trace of coloring matter, not only for durability but for appearance. White cement makes the best base for them. A limiting proportion, not exceeding six pounds of color to one hundred pounds of cement, is best.

Another method of securing color is by absorption. After the cement has had several days to set, it may be stained with some aniline color, sulphate of copper or iron. A penetration of one thirty-second of an inch to one eighth of an inch is quite sufficient. A great number of experimental methods of color absorption have been made. One of the cleverest is to rub green grass over the cement to stain it to a time worn bit of antiquity.

Of course, there are opaque dampproof cement paints which can be applied, but these are bound to give the uninteresting texture which is to be avoided, since they add a skin and cover the life of the aggregate.

To prevent the usual staining of the surface by rain water, the concrete should be made very compact by carefully grad-

ing the sand and aggregate. Some proprietary waterproofing compound may be added, or hydrated lime used, but all of these are of doubtful value. The very dry, porous mixtures used in the manufacture of concrete blocks, are more apt to show moisture than wetter mixtures. White cement, mixed with light colored aggregates and tooled will not show any disagreeable water mark. On the other hand, grey concrete will appear darker when badly wet with rain. In sections of the country where little rain is prevalent the question of how to avoid staining from moisture is not of great importance.



An Excellent and a Poor Example of Concrete Finish. The Corner Stones Are Finished With the Pointer and Appear Well. The other Stones Have Aggregate of Too Large Size Impressed Into Surface.

WORKINGMEN'S HOUSES IN ITALY



By Alfredo Melani

PART II

IN Rome there are two notable institutions which build workingmen's houses, namely, the Institute for Popular Homes and the Roman Real Estate Institute. The two differ greatly. The first belongs to that class of institutions created exclusively for the provision of workingmen's homes, while the Roman Real Estate Institute is interested in dwellings for the more prosperous elements of the population as well as in workingmen's houses. I shall not go into detail as to the better class of houses because they lie outside the scope of this study.

THE TESTACCIO QUARTER

Act 116, passed April 6, 1908, authorized the Cassa dei Depositi e Prestiti to make to the municipality of Rome a loan of ten million lire to be allocated to the Institute for Popular Homes. With that loan it was possible to begin the construction of houses in the Testaccio Quarter, which is not too far from the center of the city and is united to it by a tramway line.

The land belonged to the Italian Society for Real Estate Dealings, which sold it to the Institute for 10.80 lire per square meter. Construction was begun under the architect Giulio Magni.

Eleven large plots were sold to the Institute for a total of 6,363,212 lire. Each apartment consists of a hall, of one, two, three, or four rooms, and of a kitchen and a water closet. The houses contained 913 apartments, divided in the following manner:

Apartments of	Number	Per Ct.
5 rooms	24	2.63
4 rooms	332	36.56
3 rooms	499	54.65
2 rooms	58	6.36

The two-room and three-room apartments, the ones most in demand, comprised 91.01 per cent. of the total number. The building area was utilized as follows:

Entrances, halls and water closets,	92.00 sq. m.	11.22%
Stairways	52.50 sq. m.	6.41%
Rooms	491.78 sq. m.	59.95%
Walls	184.72 sq. m.	22.42%

In "La Construction Moderne" of Paris, some years ago, I wrote in detail on the subject of the early constructions in the Testaccio Quarter. I shall speak now of the more recent constructions, Blocks 30, 32, 33, and 34, which show the best work done in Rome in workingmen's homes.

In planning these newer groups of houses, the cooperation of architects Pirani and Bellucci was obtained. The buildings, being varied as to both height and exterior design, avoid the monotony so common in long rows of workingmen's houses. The open spaces give plenty of air and light, the courtyards, with their green foliage, being large and well distributed.

The decoration is very simple. We realized that the people appreciate beauty. It is necessary, however, that art adapt itself to the needs of the people. I have often suggested in my books the abandoning of historic traditions in art to suit new and actual conditions. Other-

wise it will be impossible to have popular art. A home which, besides being convenient, offers a beautiful appearance is, of course, to be preferred; and it must also be remembered that an artistic house receives greater care from the tenant.

In the new buildings more thought has been given to the decoration than was given in the earlier ones, without however spending more; in fact, the expense is sometimes less, since the decoration is structural, embodied in the masonry of stone and brick.

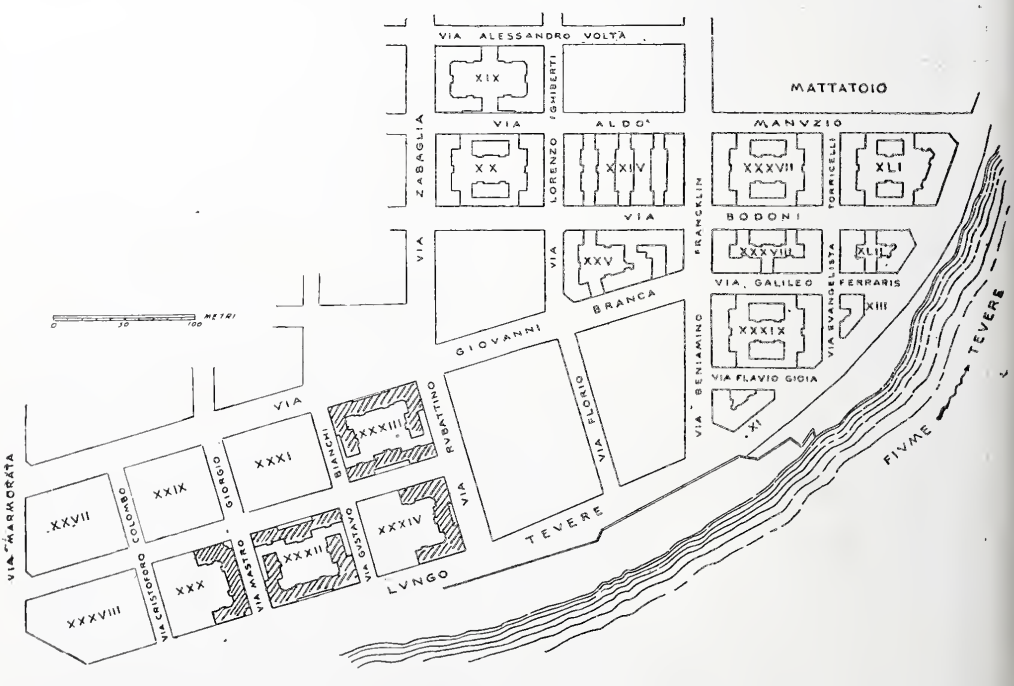
The cost of the decoration, including the travertine, terra cotta, brick, etc., amounts to 7.63 lire per square meter of the street façades and 2.24 lire on the other elevations.

In the buildings of Block 34, constructed in 1913, for which we used stucco decoration, the cost was 6.72 lire per square meter in the external perspectives, and 3.36 lire per square meter in the others.

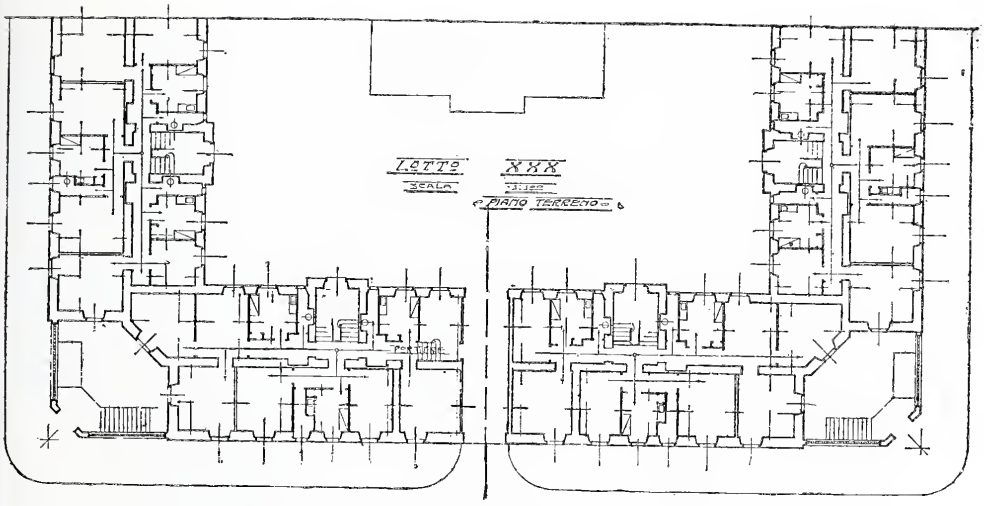
Every apartment has an independent entrance, with convenient, airy and well lighted stairways; each room has at least one window on the street. The outside windows are furnished with awnings. The kitchens and water closets have been much improved over those in the earlier houses. The kitchen chimney, made of cement and iron, does not take up much room and accommodates coal and gas stoves. The sinks are of red granite and cement, deep and surrounded by sheets of the same material; shelves in the wall serve as receptacles for dishes. Each apartment has running water and electric light.

There are many apartments of only two rooms and kitchen and some of only one room and kitchen. There are 395 apartments, of which ninety-nine have two rooms; 234, three rooms; fifty-eight, four rooms, and four, five rooms.

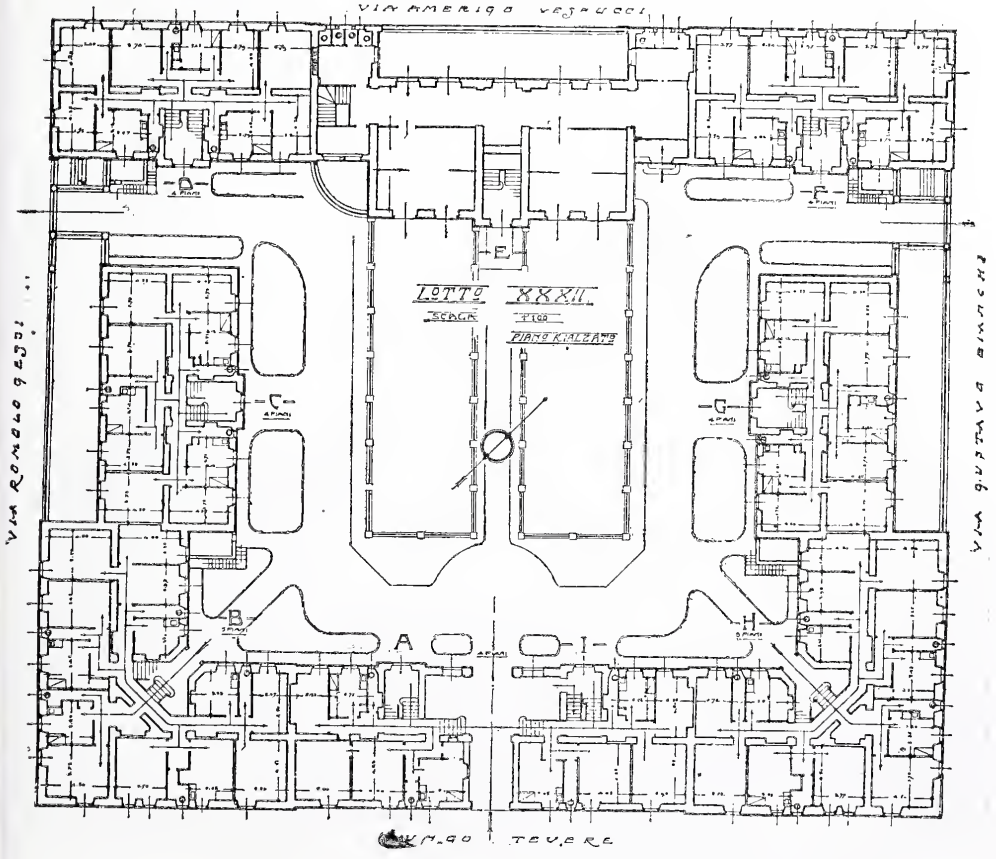
The depth of the foundations necessitated by the nature of the walls, induced us to excavate sufficiently to obtain basement rooms. These are high, well aired and well lighted, with street entrances independent of the apartments, and are



HOUSING DEVELOPMENT OF THE INSTITUTE FOR POPULAR HOMES IN THE TESTACCIO QUARTER, ROME, SHOWING RECENT CONSTRUCTIONS (BLOCKS 30, 32, 33 AND 34).



PLAN OF BLOCK 30 IN TESTACCIO QUARTER, ROME.

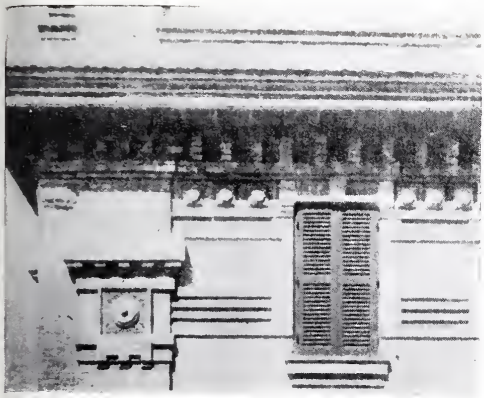


PLAN OF BLOCK 32 IN TESTACCIO QUARTER, ROME.





RECENT TENEMENTS IN TESTACCIO QUARTER, ROME, BUILT BY THE INSTITUTE FOR POPULAR HOMES.

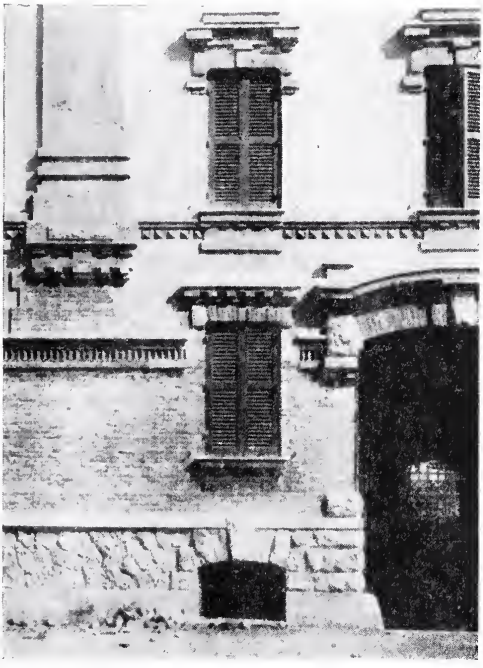




rented as stores, shops, etc.

Laundry rooms are found on each floor, one for each stairway, and each tenant may use once a week two wash tubs. The drying rooms are on the adjacent roof and are convenient to the tenants. Children's rooms are on the ground floor, together with a school of domestic economy.

The walls and stairways represent twenty-eight per cent. of the covered area and the construction is economically perfect.



DECORATIVE DETAILS OF TENEMENTS IN TESTACCIO QUARTER.

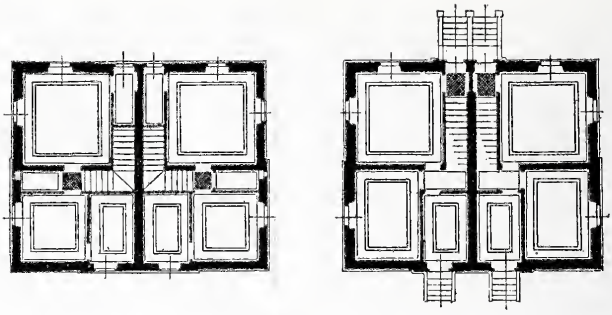
THE SAN SABA QUARTER.

This quarter is situated on a hill where stands the small, but interesting, Church of S. Saba, erected on the ruins of the house and, later, Oratory of S. Saba, mother of Gregory the Great. The institute, helped by the municipality, which sold the ground on very satisfactory terms, has built a Garden City, with beautiful, economical and convenient houses.

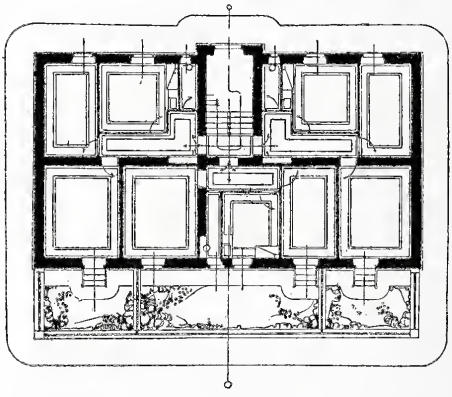
Difficulties were met with while excavating. At eight meters were found large galleries of tufa, which caused an unexpected increase in the cost of construction. The idea of two-story houses had to be abandoned, because the expense of the foundations was out of proportion with the income to be derived from a two-floor house. The floors were therefore increased to three and four in number.

This quarter, planned and begun by the Technical Office of the Institute, was continued and finished by architects Pirani and Bellucci, directors of the Co-operativa Aventino.

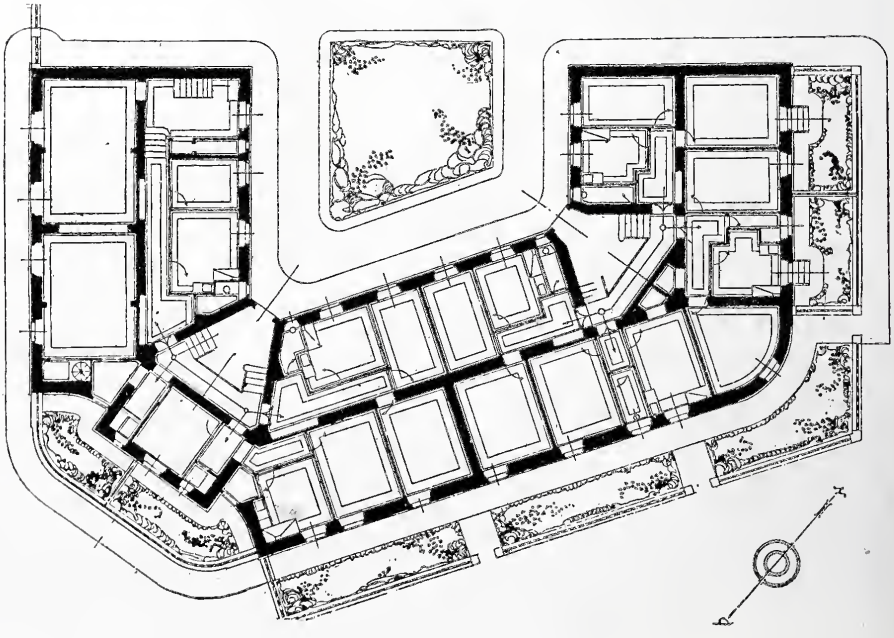
There are 100 houses, eighty-seven with two floors, seven with three floors, and six with four floors; that is, 330 apartments with 1200 rooms, besides stores, schools, and facilities for various activities of a social character. The apartments are divided in this way: Seventy-two of one room and kitchen, 123 of two rooms and kitchen, sixty-one of three rooms and kitchen, thirteen of four rooms and kitchen, fifty-one of five rooms and kitchen. The kitchen, according to



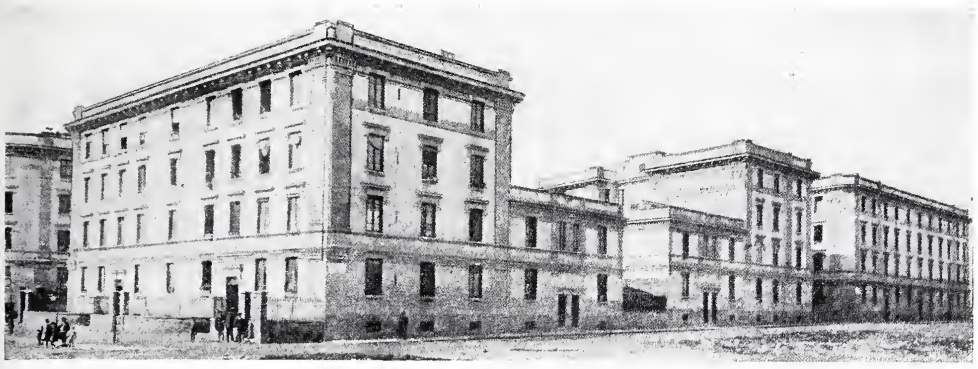
TWO-STORY TENEMENTS.



THREE-STORY TENEMENTS.



FOUR-STORY TENEMENTS IN SAN SABA QUARTER, ROME.



TWO-STORY AND FOUR-STORY TENEMENTS IN SAN SABA QUARTER, ROME.

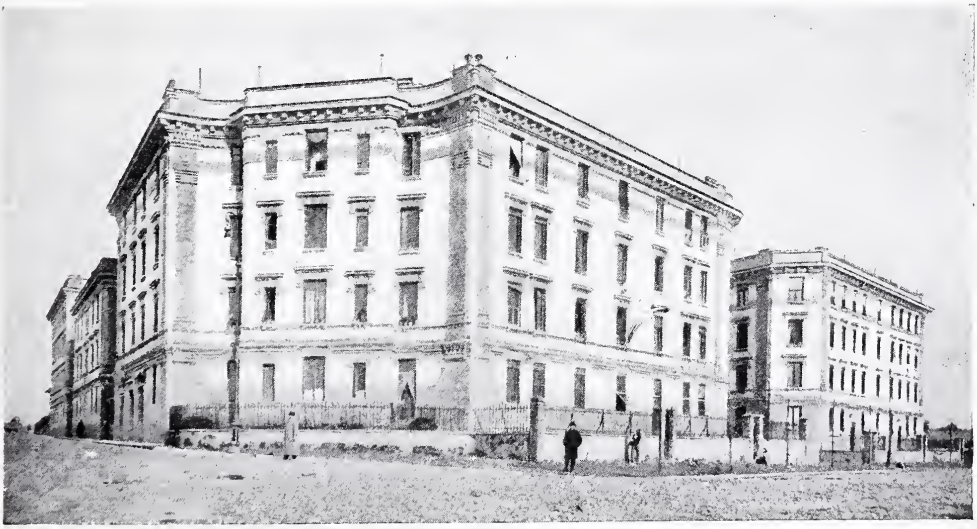
the Roman custom, is never included in the count of "rooms."

The apartments in the two-floor buildings have a separate entrance and a garden, and contain four, five or six rooms.

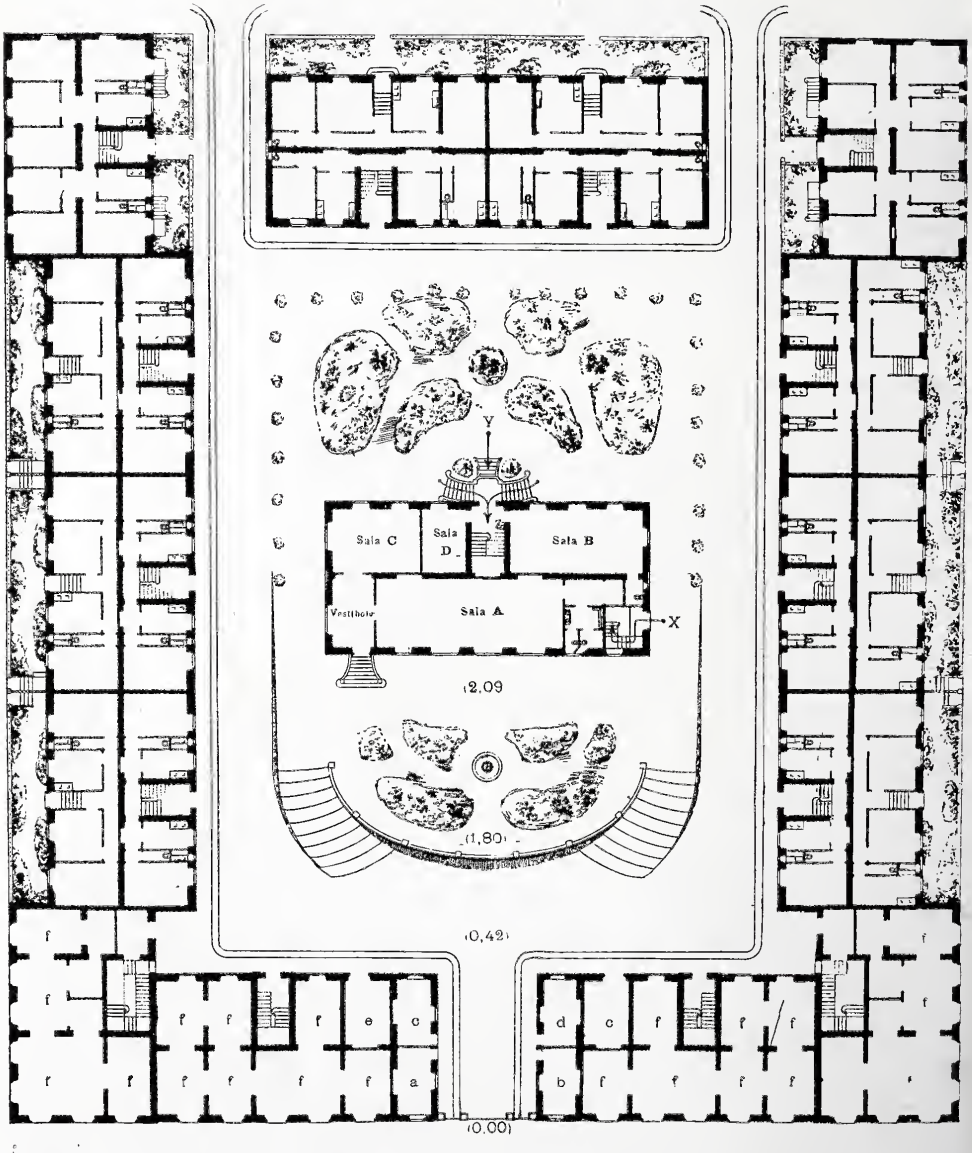
In the three-floor buildings, the apartments are always separated by a hall and by various stairways. Each apartment has a water closet with running water and wash tubs.

San Lorenzo Quarter.

The Roman Real Estate Institute has improved and transformed the San Lorenzo Quarter, the poorest and at one time the most ill-famed in the capital. It was built between 1884 and 1888, when the speculative building mania invaded Rome, and has all the faults of that period. It was there that the avidity of gain, the leasing and subleasing was carried farthest, causing overcrowding, promiscuity, immorality and crime. By demolishing some of the old buildings and remodeling the rest, the San Lorenzo Quarter was freed from overcrowding, was purified and humanized. Twelve old buildings were transformed, being grouped in four great units, which cover a total area of 6,484 square meters, and in which 300 families live with their children, who attend the school built for them. The occupancy is reduced to only



THREE-STORY AND FOUR-STORY TENEMENTS IN SAN SABA QUARTER, ROME. BUILT BY THE INSTITUTE FOR POPULAR HOMES.



BLOCK REMODELED BY THE ROMAN REAL ESTATE INSTITUTE IN SAN LORENZO QUARTER, ROME. (SALA A, NURSERY; B, PLAYROOM; C, SEWING MACHINE ROOM; D, DISPENSARY.)

two people for each room. The subleasing, through which formerly four people crowded into a room, has now almost disappeared. For every 100 persons living in a building there used to be seventy-seven boarders or renters, now there are only five per 100.

I cannot speak of other important cities, Turin, Genoa, Florence, Naples and Bologna; but I feel sure that the movement toward better workingmen's homes is daily gaining in our country and that, the war being over, the movement will be greatly accelerated.

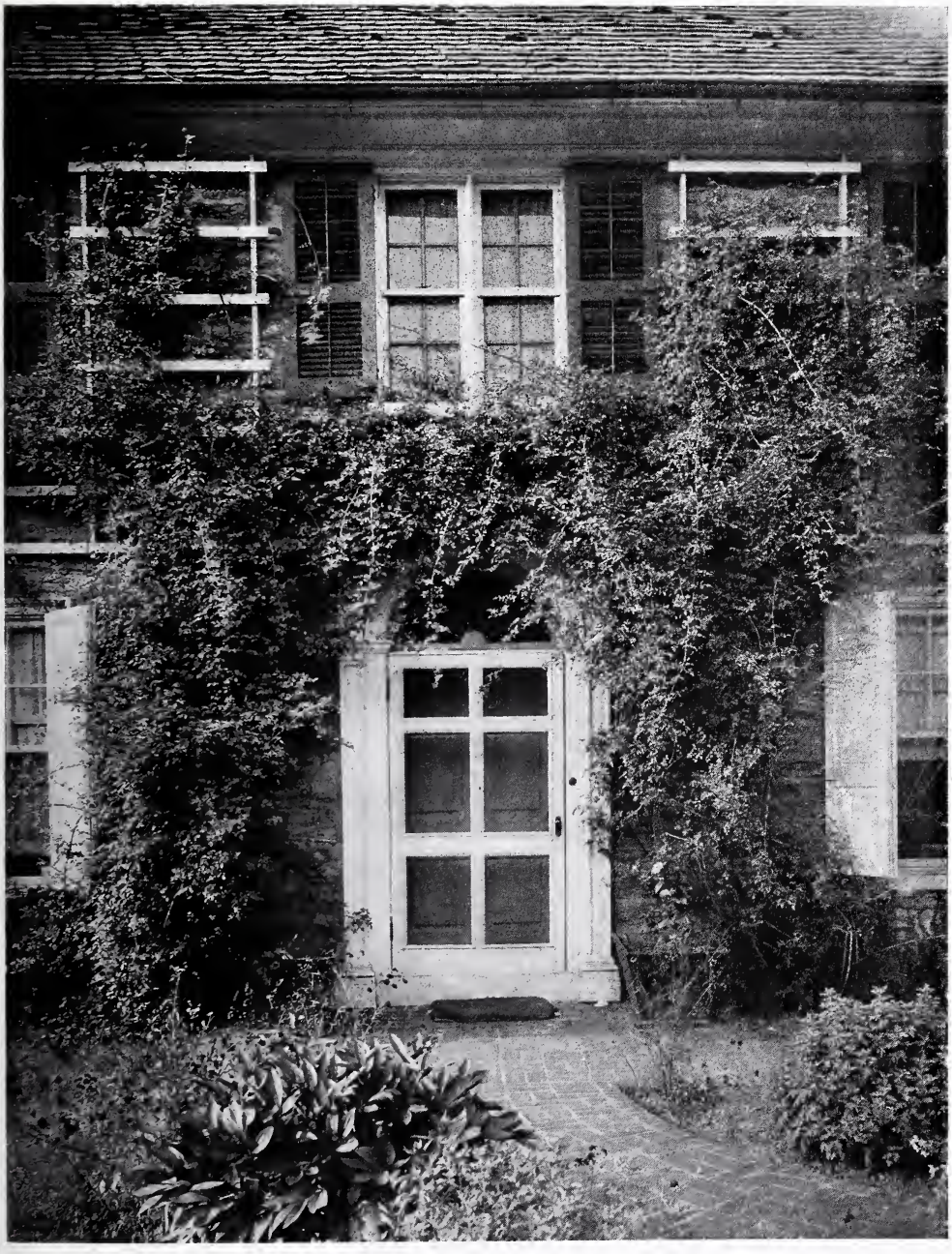
PORTFOLIO OF CVRRENT ARCHITECTVRE



WEST FRONT—RESIDENCE OF MRS. FREDERICK PACKARD, CHESTNUT HILL, PHILADELPHIA, PA. WILLING & SIMS, ARCHITECTS.



GATE AND GARDEN—RESIDENCE OF MRS. FREDERICK PACKARD, CHESTNUT HILL, PHILADELPHIA, PA. WILLING & SIMS, ARCHITECTS.



HOUSE DOOR—RESIDENCE OF MRS. FREDERICK PACKARD, CHESTNUT HILL, PHILADELPHIA, PA. WILLING & SIMS, ARCHITECTS.



LIVING ROOM—RESIDENCE OF MRS. FREDERICK PACKARD, CHESTNUT HILL, PHILADELPHIA, PA. WILLING & SIMS, ARCHITECTS.



HALL AND DINING ROOM—RESIDENCE OF MRS. FREDERICK PACKARD, CHESTNUT HILL, PHILADELPHIA, PA. WILLING & SIMS, ARCHITECTS.

(For plan of first floor, see page 277.)



RESIDENCE OF G. G. DOMINICK, ESQ., STAMFORD, CONN.
DESIGNED BY ARTHUR LOOMIS HARMON, ARCHITECT,
FOR WILLIAM H. REID, ESQ., THE ORIGINAL OWNER.



RESIDENCE OF G. G. DOMINICK, ESQ., STAMFORD, CONN. ARTHUR LOOMIS HARMON, ARCHITECT.



RESIDENCE OF G. G. DOMINICK, ESQ., STAMFORD, CONN. ARTHUR LOOMIS HARMON, ARCHITECT.



RESIDENCE OF G. G. DOMINICK, ESQ., STAMFORD, CONN. ARTHUR LOOMIS HARMON, ARCHITECT.



RESIDENCE OF EARLE P. CHARLTON, ESQ., WESTPORT HARBOR, MASS. FARLEY & HOOPER, ARCHITECTS



RESIDENCE OF EARLE P. CHARLTON, ESQ., WESTPORT HARBOR, MASS.
Farley & Hooper, Architects.



RESIDENCE OF EARLE P. CHARLTON, ESQ., WESTPORT HARBOR, MASS.
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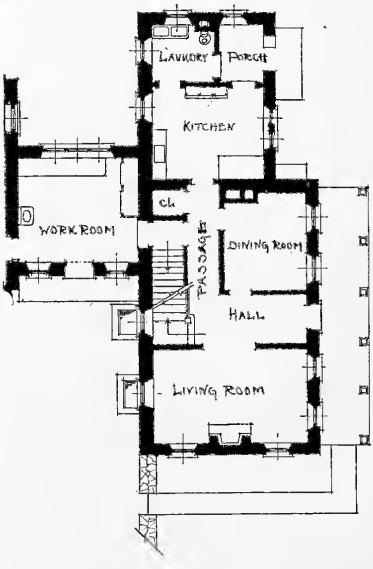
RESIDENCE OF EARLE P. CHARLTON, ESQ., WESTPORT HARBOR, MASS.
Farley & Hooper, Architects.



RESIDENCE OF EARLE P. CHARLTON, ESQ., WESTPORT HARBOR, MASS.
Farley & Hooper, Architects.



SOUTH FRONT—HOUSE AT LAVEROCK, PA.
John Graham, Jr., Architect.



FIRST FLOOR PLAN—HOUSE AT LAVEROCK, PA.
John Graham, Jr., Architect.



KITCHEN WING—HOUSE AT LAVEROCK, PA. JOHN GRAHAM, Jr., ARCHITECT.



WESTERN END—HOUSE AT LAVEROCK, PA. JOHN GRAHAM, Jr., ARCHITECT.



PORCH DETAIL—HOUSE AT LAVEROCK, PA. JOHN GRAHAM, Jr., ARCHITECT.



NORTH SIDE—HOUSE AT LAVEROCK,
PA. JOHN GRAHAM, Jr., ARCHITECT.



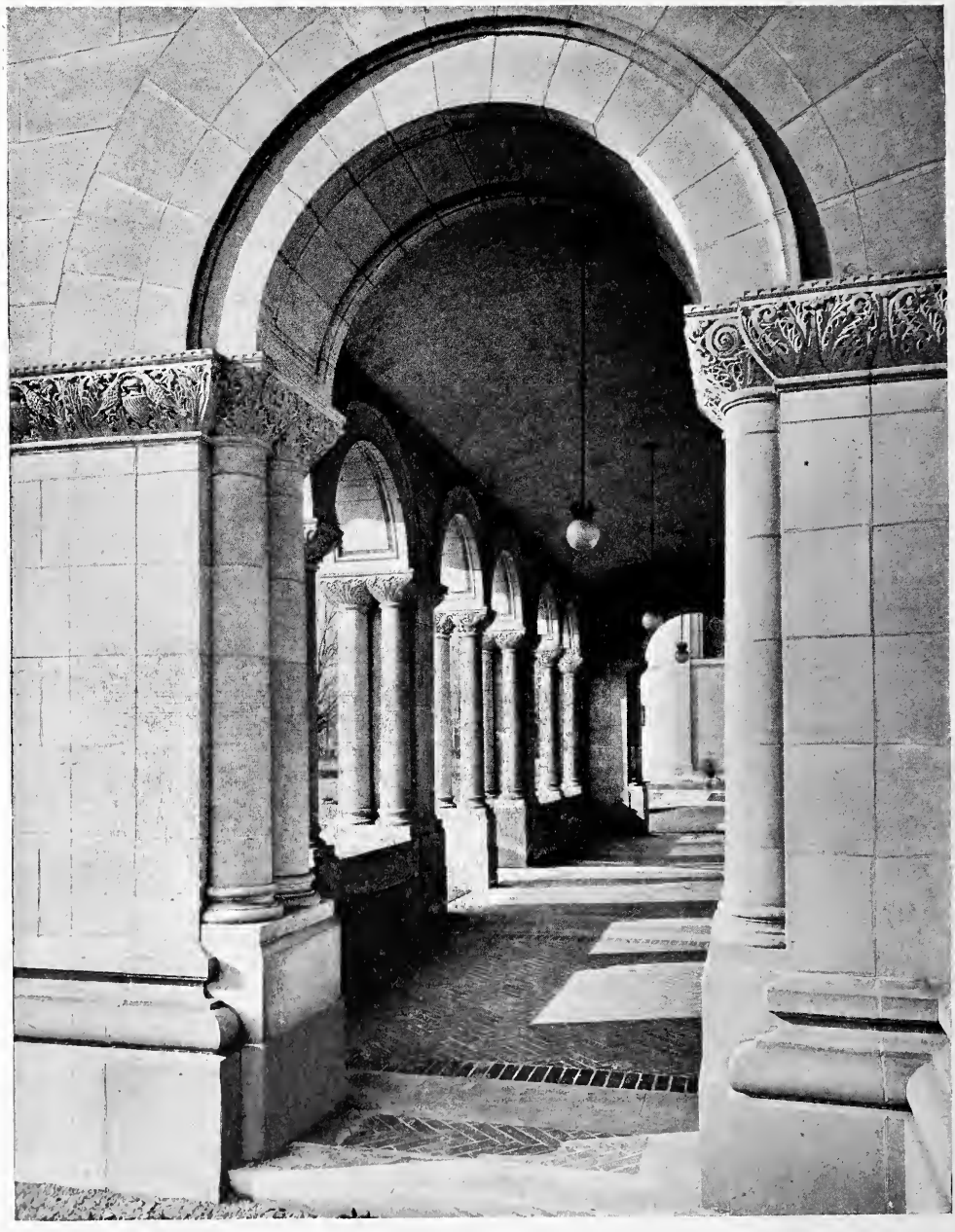
REAR—HOUSE AT LAVEROCK, PA.
JOHN GRAHAM, Jr., ARCHITECT



MAIN ENTRANCE—ADMINISTRATION BUILDING,
OBERLIN COLLEGE. CASS GILBERT, ARCHITECT.



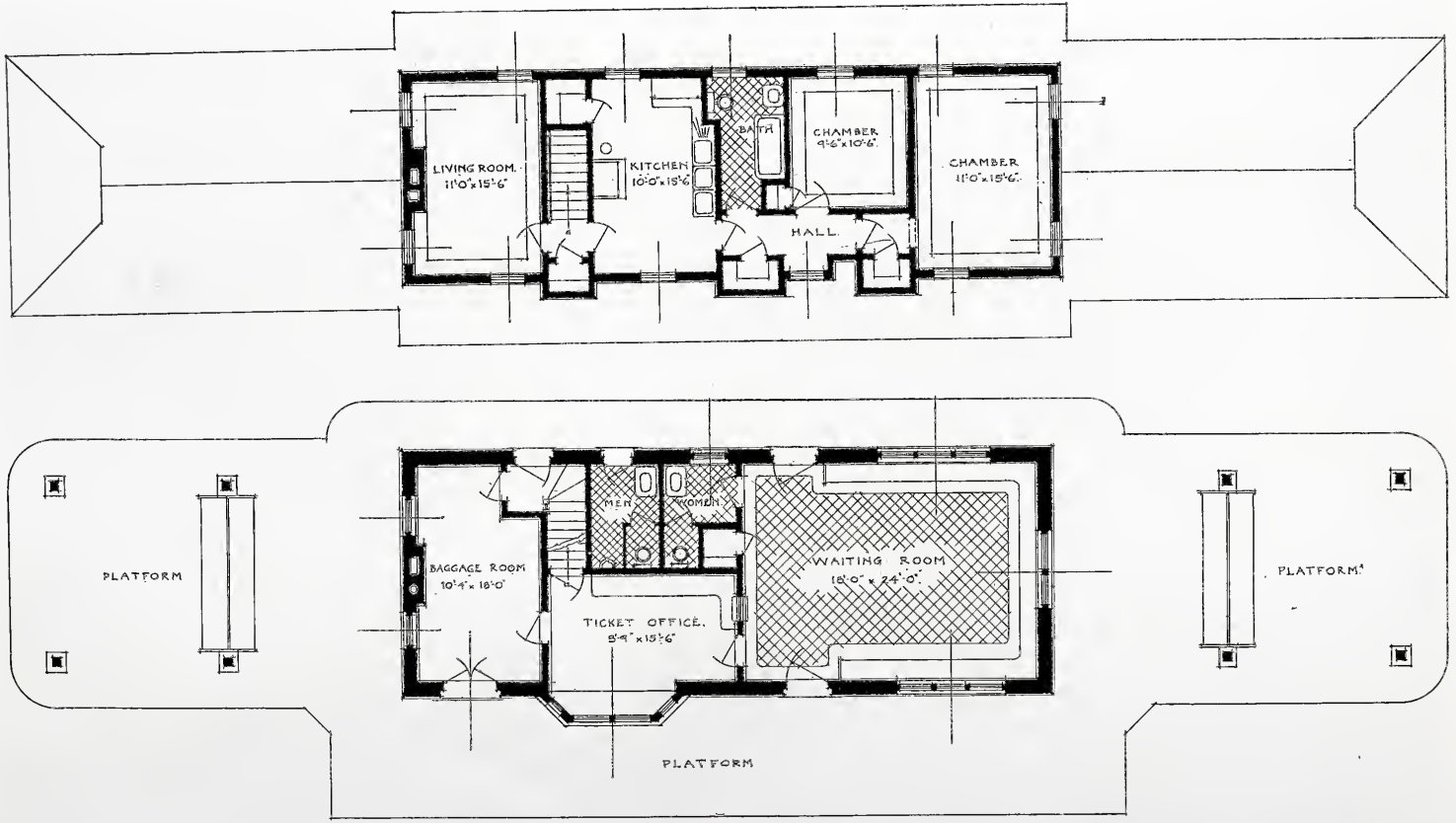
ADMINISTRATION BUILDING—OBERLIN COLLEGE. CASS GILBERT, ARCHITECT.



LOGGIA—ADMINISTRATION BUILDING, OBERLIN COLLEGE. CASS GILBERT, ARCHITECT.



FINNEY MEMORIAL CHAPEL, OBERLIN COLLEGE. CASS GILBERT, ARCHITECT.



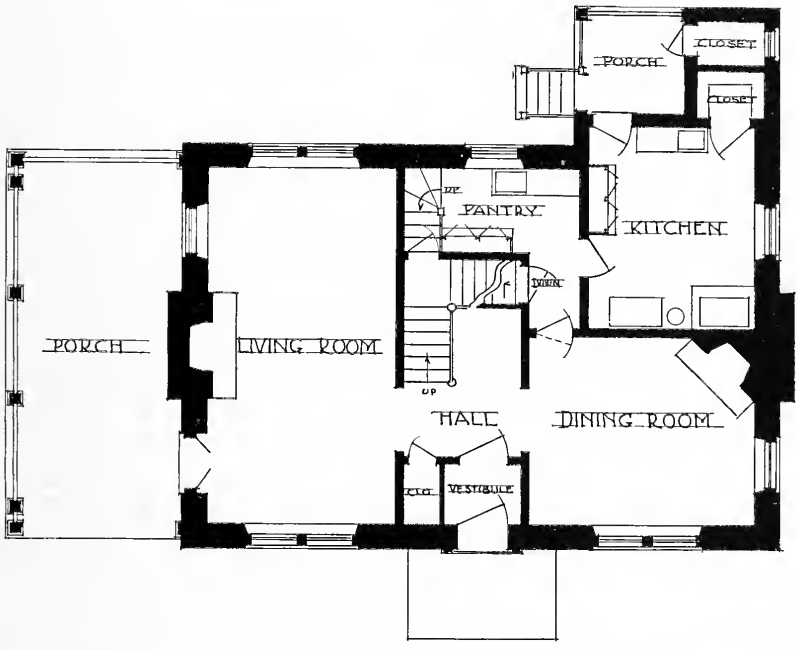
FIRST AND SECOND FLOOR PLANS—
RAILWAY STATION AT BALDWIN,
L. I. FRANK J. FORSTER, ARCHITECT.



RAILWAY STATION AT BALDWIN,
L. I. FRANK J. FORSTER, ARCHITECT.



RAILWAY STATION AT BALDWIN,
L. I. FRANK J. FORSTER, ARCHITECT.



FIRST FLOOR PLAN—RESIDENCE OF MRS. FREDERICK PACKARD, CHESTNUT HILL, PHILADELPHIA, PA. WILLING & SIMS, ARCHITECTS. (For photographic views of this house, see pages 251 to 255.)

A WAR MEMORIAL BIBLIOGRAPHY*

By FRANK WEITENKAMPF

THE late war was not a year old when some people began to be concerned about the memorials which it was likely to produce. Lawrence Weaver issued his book on "Memorials and Monuments" in London as early as 1915 in the hope that it might be "useful to people considering memorials and * * * lead them to the artist rather than to the trader." The warning was necessary in the light of past experience, and its timeliness and need was proven by designs appearing in some architectural periodicals within the following year.

The libraries, those good old uncles of so many inquirers, would have been well put to it to give help at the time, because the available pictures of soldiers' and sailors' monuments of earlier date so frequently embodied just those characteristics and elements which one was advised to avoid. But within the past year or two there has appeared a swarm of articles, pamphlets, resolutions, interviews on the subject. Much of this is propaganda literature in favor of one form or another of memorial. But much of it, also, was prompted by the desire to save us from post-war horrors and to combat the influence of the metal founder's stock patterns.

Many things have been suggested beside the traditional monument, arch or statue—bridges, fountains, community houses, library buildings, shrines, flagpole bases, trees. Perhaps the best suggestion made is that we wait a while before putting up any monumental memorials—ten years or so. (Did not France resolve to do that?)

In the belief that this printed material might be suggestive and helpful, the following list was prepared for the New York Public Library. (In the Art Division of the library there has also been started a collection of clippings on the subject—text and pictures.) It will be seen that many of the titles are quite fully annotated or summarized, thus offering practical help and making this bibliography an instrument for immediate use.

The list covers only memorials having "structural embodiment," as some one has put it. That excludes medals, for instance. Nor have there been included descriptions and pictures of memorials of other days, so often the products of patriotism unrestrained by ideas of taste and fitness. It is the present time, with its ideals and problems and activities that is to be served. Of course, in the discussion of this question, consideration of the basic principles underlying sculpture and monumental structures has its important place and will properly refer to the great achievements of past ages. In fact, it is precisely general principles that are to be defined and established, rather than individual examples to be set up as patterns to be copied more or less blindly. In that way the best help is offered for choosing the appropriate memorial for the particular locality. Even if many specific patterns existed, the danger of the cut-and-dried would be present. Between that and the excursion into the odd, lies the golden mean.

The following list, then, is to be considered a guide-post pointing the way:

GENERAL WORKS.

American Academy of Arts and Letters, and the matter of memorials. (American architect, Feb. 5, 1919, p. 202.)MQA

"An appeal that all memorials . . . be of the highest artistic merit. Reference is made to the National Commission of Fine Arts, and the admirable effect that this commission has had upon the character of national memorials. Similar commissions in states and municipalities have been doing good work, but it is necessary that supervision of memorials everywhere be by equally competent authority."

American Civic Association. Civic comment. No. 2. July 16, 1919. Clipping Collection, Room 229.

Trees, rose-gardens, university halls, parks, highways, are suggested.

American Federation of Arts. Second cir-

*Reprinted, by permission, from advance proofs of the *Bulletin of the New York Public Library* for August.

cular, Feb. 24, 1919: War memorials. 4p. 8°. MAAD

—— Suggestions to those who are considering erection of war memorials. (Art and archaeology, v. 8, March, 1919, p. 124.) MTA

See also *Evening Post* (N. Y.), May 17, 1919, and *N. Y. Times,* May 18, 1919, on the A. F. A.'s activity.

—— War memorials. (American magazine of art, v. 10, pp. 180-183.) MAA

List of Advisory Committee of American Federation of Arts, the committee to advise organizations intending to erect war memorials how to secure work "having artistic merit." "Pains should be taken to make organizations understand that the Committee is not interested in any particular form of memorial or in any particular artists." The following principles adopted: Memorials may take many forms, varying with the nature of the site, the amount of money available, the desires and needs of the community. Among many types may be mentioned: flag staff with memorial base, fountain, bridge, building devoted to high purposes, educational or humanitarian, tablets, gateways, symbolic groups, portrait statues, medals, stained glass windows, village green. Professional advisers necessary.

This committee of the A. F. A. is referred to also in the *American Architect,* March 26, 1919, p. 461.

—— War memorials. (Architect and Engineer, June, 1919, pp. 92-94.) MQA

Mainly a reprint of the principles adopted by the General Committee of the American Federation of Arts, "substantially the same as the ones laid down by the National Commission of Fine Arts and approved by the National Academy of Arts and Letters."

American Magazine of Art. May, 1919. War memorial number. MAA

"Memorials of the great war," Charles Moore; "The permanent memorial," Arnold W. Brunner; "War's teachings," R. C. Sturgis; "Typical Memorials," I. F. W. MacMonnies; II, P. W. Bartlett; III, H. A. MacNeil; "Essentials in memorial art," H. Saint-Gaudens; "Six good memorials," H. Bacon; "The memorial tablet," A. Adams; "Fine monuments," I, E. C. Tarbell; II, F. F. Mather, Jr.: "How a war memorial was planned," S. Baxter; "The spirit of war memorials," C. Beaux; "Memorials in painting," V. Oakley; "Appropriateness in memorials," Mrs. S. Van Rensselaer.

"It may well be doubted," says Charles Moore, "whether the time has come to express the ideas and ideals of the Great War. . . There is, however, one class of memorials clearly called for. There is no community so remote, so small, that it has not sent some of its sons and daughters into the Great War. . . Somewhere, in some manner, the name of every man and woman who had an active part in war work should find due and fitting record in the community . . . in simple, straightforward manner. The favorite memorial will be the tablet. . . A certain firm of American bronze-tablet makers has . . . applied to sculptors to prepare designs that could be reproduced indefinitely. To an artist, indefinite reproduction of a single design, irrespective of location, lighting, or expression of individual character, is distasteful. . . . Eminently fitting is a flagstaff. The bridge . . . fountains . . . the village green, gateways to parks, stained glass windows . . . portrait statues [are acceptable]."

Benson, A. C. Lest we forget: a word on war memorials. (Cornhill magazine, London, new series, v. 41, Sept., 1916, pp. 295-301.) *DA

"We must have a plan and a purpose, and not be in too great a hurry. . . . Let us commemorate by a memorial which arrests the eye, is gratefully remembered, and by an inscription which touches the heart. . . . We are always weak in allegorical representation. . . . We ought to fight shy of elaborate designs. What we need is simplicity of statement with perhaps a touch of emblem. . . . I hope that we shall not accumulate resources on one national monument, to astonish tourists and feed our vanity; but that as many places as possible should have a record."

Brockway, A. L. Observations on types of memorials. (American architect, April 9, 1919, pp. 511-514.) MQA

"In order promptly to celebrate . . . it has been necessary to do a good deal of work of a temporary character . . . which will soon disappear. Anything done to commemorate participation in this World War should be carefully considered. . . . The Triumphal Arch invariably commemorated . . . wars of aggression and conquest. . . . I cannot see the appropriateness of the Triumphal Arch or monument symbols of ancient times commemorating events of fundamentally different character. The monuments which we ereet should be expressive of our lives, . . . of a type and kind which would keep before our eyes those great principles and thoughts of the government upon which the United States was founded."

Budden, Lionel B. The regional and civic commemoration of the war. (Town planning review, Liverpool, vol. 7, March, 1918, pp. 183-194.) MSA

"All projects for commemorating the war can be placed in one of two categories—those which involve structural embodiment and those which do not. It will be the object of this article to submit a programme in reference to the former.

"Four main classes are comprised within it: I. Monuments. II. Works of public utility. III. Institutions with an educative, philanthropic or other social purpose. IV. Functional structures of Types II. and III. monumentally treated.

"Any memorial [must] be appropriate to the subject which has inspired it. . . . In demoeratic countries memorials having a practical purpose will be preferred to those which simply record or are symbolical. . . . The present war is . . . unexampled . . . and requires to be commemorated in a manner not less exalted. . . . If minor and particular monuments are inadequate, and Titanic conceptions of a non-utilitarian kind impracticable, one alternative remains—a programme of Regional and Civie Design. Constructive work which will benefit the community must be justifiable on economic grounds . . . only Regional and Civic Design are capable of satisfying these requirements of achieving at the same time a noble and permanent expression of our ideals."

The artiele, written from the British standpoint, suggests legislation, a commission, and grouping of regions.

N. Y. Times, Aug. 4, 1918, has a note on this "extensive program of regional and civic design."

Civic Arts Association. Competition for war memorials. Illus. (Architectural review, London, Aug., 1916, pp. 35-39.)

Clark, Somers. War memorials. (Architect and contract reporter, London, vol. 96, July 14, 1916, pp. 22-23.) †MQA

Introduction to thirty-ninth annual report of Committee of Society for the Protection of Ancient Buildings. "Conecrned . . . with ill-considered memorials both within and around our venerable and beautiful old churches . . . the congruity of the memorial with its surroundings. . . . As a specimen of hopeless incongruity, the Tennyson memorial outside Lincoln Minster. . . . It is a common thing

for sculptors to be invited to send in their schemes when the situation of the memorial has not yet been decided upon. . . . The nave of Winchester Cathedral . . . is sadly defaced by specimens of brass. . . . One of our noblest buildings defaced by the glassmakers—Westminster Abbey."

Danger in "war memorials." (Minnesota municipalities, v. 4, April, 1919, p. 62.) SERA

Gillies, J. W. The effect of war upon architecture. (Arts and Decoration, May, 1919, pp. 7-9, 38-42.) MAA

"Great memorials will spring up all over the country. They will be monumental. . . . Let us hope they will be in stone."

A great variety of war memorials. (N. Y. Public Library.) Municipal reference notes, April 2, 1919, p. 266. *HND

"A National Committee on Memorial Buildings (261 Broadway) has been formed, which has issued two bulletins." See under NATIONAL, in section "Community Houses."

Kansas. Legislature. Hero memorials for the cities and counties of Kansas, April 8, 1919, 4p. (House Bill No. 690.)

This bill was approved March 22, 1919.

Memorials and monuments; competition and exhibition of the Civic Arts Association. (Country life, London, vol. 39, May 13, 1916, pp. 2*-6*.) †MVA

The classes include monument, wall tablets, mural painting, fountain, "inexpensive memorials for the home."

Memorials of war.—I. Ancient; II. Renaissance; III. Napoleonic; IV. Modern British; V. Modern French; VI. Modern Italian; VII. American; VIII. German. By R. R. P. and A. E. R. Pl. and illus. (Architectural review, London, 1915, Feb.-May, July-Oct., Dec.; 1916, Nov.)

Monod, Sir Alfred. War memorials: plea for erection of ideal schemes. (Royal Institute of British Architects. Journal, v. 25, 1918, pp. 247-248.) MQA

Appeared also in *American Magazine of Art*, vol. 10, 1919, p. 99-100, and in *Pall Mall Gazette*, Aug. 26, 1918.

"The tendency to confuse philanthropy, utility, and art is often disastrous. . . Wings of hospitals, baths, libraries, etc., all excellent civic objects, do not for that reason become memorials of a great historic event. War memorials [must] make plain what they commemorate. Locality, surroundings and local associations must be carefully regarded. It might be possible to have some central idea on the lines, perhaps, of beautiful market crosses, to attempt . . . a united scheme emblematic in stereotyped form. . . . Of course the Imperial War Museum . . . and the other museums . . . will naturally be permanent records of the great endeavor of the nation. While not themselves symbolic monuments of the war . . . the buildings will lend themselves naturally to combinations of a sculptural character."

Monuments and reason. (Builder, London, v. 110, Feb. 4, 1916, p. 99.) †MQA

"Practical demands on the Nation's depleted resources will be so enormous that it is unlikely that any great war memorials will be carried out within a decade of the termination of the war. Small personal memorials will no doubt be erected in numbers. . . . The delivery of the first of Prof. Adshead's lectures on 'War Memorials: their significance and treatment,' on the 26th ult., was followed by a meeting on the 28th . . . at which the Civic Arts Association was inaugurated. . . . Monumental art has never been well understood in this country. . . . We believe . . . [in] the precept *festina lente*. . . . Prof. Adshead stated that monuments to commemorate the present war must be conceived on a gigantic scale. . . . Although we appreciate a very able exposition of the subject, we feel that such schemes are alien to the national character. . . . A bridge over the Thames, a Memorial Chapel at Westminster, or a southern embankment along the river are more likely to be the type of memorial schemes which will find support. . . . While we wish to see the cause of the architectural and sculptured arts furthered . . . we feel that the process of education must be a very gradual one. . . . "

Municipal Art Society of New York City. Bulletin, No. 17, 1919: War memorials, 22 p. illus. MSA

"When the project of the War Memorial comes up . . . three questions arise: the form . . . possible within the appropriation; its character; whether it shall be entrusted to a professional artist or a business firm. This Bulletin discusses these questions, illustrating some existing forms of American memorials and suggesting others."

Suggestions are: Arch, beacon, bridge, clock tower, colonnade, community house, embarkade, exedra, gateway, library, monumental electrolier, museum or hall, open air theatre, roster column, rostrum, equestrian statue, figure or group, fountain, pylon, cliff sculpture, doors, flag pole and base, avenue, grotto, park, arrangement of war trophies, mosaic or mural painting, stained glass window, tablet.

The *Municipal Reference Library Notes*, N. Y. Public Library, April 21, 1919, p. 266, calls this "one of the most exhaustive studies of the subject yet received." *Evening Post* (N. Y.), Feb. 1, 1919, and March 29, 1919, and *Evening Sun*, April 2, 1919, also reviewed this Bulletin, and *Arts and Decoration*, May, 1919, p. 18-19, had a summary: "War Memorials, what the Municipal Art Society of New York City is doing about them."

Plates representing war memorials in Great Britain. (Builder, London, May, 1919.) †MQA

Protecting America from the atrocities of art. Illus. (Current opinion, N. Y., v. 66, March, 1919, pp. 187-188.) *DA

Resumé of the appeals of the American Federation of Arts and the Municipal Art Society.

Quinton, Cornelia B. Sage. War memorials. (Academy notes, published by the Buffalo Fine Arts Academy, v. 14, July-Sept., 1919, pp. 100-101.) 3MAA

"We cannot create adequate war memorials at present because we are as yet too close to the war. We are still struggling for ideals for which we have only lately ceased to fight. . . . The memorial is erected to honor patriotism and devotion to civilization, [to] commemorate the spirit of the nation as a whole, . . . war of a whole nation doing battle for its weal. The most impressive monument is one which appeals to the imagination alone . . . devoid of practical utility. . . . Display of wealth and over-elaborateness are . . . vulgar. If the utilitarian structure shall be used, it is of first importance that it shall impress by beauty of design . . . and fitness of setting. . . . Bridge . . . foun-

tains, buildings devoted to purposes educational or humanitarian . . . , whether large or small, . . . should be an inspiration. . . . This work should not be hurried. We must learn the lesson of patience."

Report on Victory Memorial [for Portland], by the Oregon Chapter of Architects. (Architect and engineer of California, v. 57, 1919, pp. 97-100.) MQA

"The scheme contemplates a monumental treatment of the park blocks which become an approach to the great shaft of victory—the Memorial Park, Memorial Hospital, and Victory Highway to the State Capitol."

War memorials. (American Institute of Architects. Journal, v. 7, 1919, pp. 30-32.) MQA

"Expert services are needed before any suitable memorial can take form, but what is needed more is a national consciousness seeking to memorialize a spiritual experience. . . . It is too much to hope that the memorials will utterly fail to glorify war and victory, and while paying homage to heroism, also point to a . . . humanity and brotherhood which will refuse ever again to adopt war as a means of settling any issue? To that end, is it not important to consider forms of memorials where men and women and children may meet . . . for work and play? Let us bring men together and not leave them cold with the frigidity of monuments that lose their power to influence. Let us . . . build something democratic. . . . Our men died for more and better life . . .—that must be our memorial to their sacrifice."

A number of communications and notes follow: One asks "why arches?" A Philadelphia conference resolved that the designing be entrusted only to artists "of the highest standing." Port Chester, N. Y., is developing a park as a memorial, community houses are considered, and a flag-staff base is suggested.

——(Architect, London, v. 96, Aug. 18, 1916, pp. 98-99.) †MQA

By E. F. C. Reprinted from *Manchester Guardian*. "The Greeks . . . preferred the direct expression of feeling to any historical delineation. . . . The eighteenth century is almost wholly allegorical. . . . Much greater individuality of character is found in Renaissance monuments. . . . [In] recent work, few are the examples we would wish studied. . . . Of recent private or corporate memorials I cannot call to mind a single eminent success."

——(Bellman, v. 26, March 15, 1919, p. 288.) †*DA

"A new idea is taking root. Most of the plans . . . have embodied the principle of beautified utility. The thought of the American public has turned from the purely sculptural to that of architectural expressions. There are proposals of bridges, viaducts, halls, embankments, boulevards, railway terminals, parks, and buildings suited to various public uses."

——(Spectator, London, v. 116, Feb. 5, 1916, pp. 183-184.) *DA

The Civic Arts Associations thus describes its aims: "Countless memorials will be in demand, and unless steps are taken to provide direction and advice. . . these will generally be of the usual trivial or commonplace type. The committee of the Association is devoting considerable attention to those . . . possible to people of small means as well as to the more costly civic kinds, to relatively humble private memorials, as well as those of a public character. . . . In small towns the best form is often some useful little building such as a school, or public room, or small local museum . . . the guiding principle should be "appropriateness.' . . . We must not fall into the error of thinking that only battle scenes . . . would provide appropriate picture memorials. One can imagine a very appropriate series of pictures in which there was not a single trace of the . . . tramplings of the battlefield. . . ."

Weaver, Lawrence. Exhibition of war memorial designs. Illus. (Country Life, London, July 22, 1916, pp. 2*-8*.) ††MVA

A review of the exhibition of designs submitted in the Civic Arts Association competition.

Williams-Ellis, Clough. War memorials. (Spectator, Feb. 19, 1916, pp. 249-250.) *DA

"There are endless possibilities in the way of memorials to which the term 'monument' could scarcely be applied. A hospital wing . . ., endowed cot . . ., village halls, bridges, groves with stone seats, avenues, walks, terraces, gardens, tablet, fountains, clocks, gates, sundials, temples, obelisks. . . . "

MONUMENTS—SCULPTURE.

Adams, A. War memorials in sculpture. (Scribner's magazine, v. 65, March, 1919, pp. 381-384.) *DA

"Until expert opinion in art is valued in our democracy our best efforts in art may at times suffer delays and contempts. But our hopes in art are more than our handicaps."

Adshead, S. D. Monumental memorials and town planning. (Architect and contract reporter, London, v. 97, 1917, pp. 105-107, 123-125.) †MQA

"Monumental memorials may be described as the jewels of a monumental town plan. . . . The finest type of [war] memorial is that which, while arousing the best sort of patriotism . . ., holds no sting. . . . The monument that is fundamentally architectural can alone evoke the deepest sentiments of a great people. But the most intimate emotions can only be aroused by sculpture." Author then considers relation of proposed monument to site, and to the whole city plan. Prof. Adshead's lectures on "War memorials, their significance and treatment," were reviewed in the *Builder*, Feb. 4, 1916, p. 99.

Arch of thanksgiving and welcome. illus. (Literary digest, v. 59, Dec. 14, 1918, pp. 26-27.) *DA

Boston Chamber of Commerce. War memorial: Chamber offers several plans. . . illus. (Current affairs, Boston, v. 1, Feb. 10, 1919, pp. 12-15.) TLA

"Suggestions for a monumental structure in the Public Gardens, to stand at head of most comprehensive system of street improvements undertaken in Boston. . . . Memorial arch proposed in addition. . . . The memorial should foster the idea of education."

Brock, A. Clutton. On war memorials. (Country Life, London, v. 39, Feb. 5, 1916, pp. 188-189.) †MVA

"A good inscription is one that says exactly what it means simply and finely. . . . Consider what in the past we have done with inscriptions, in our desire to invest them with that vague something which we call art. . . . When the lettering was not Gothic it was often fantastic in some other way, or else as dull as a handbill. . . . Like the lettering, the language should be neither shoppy nor precious."

In the Feb. 12 issue of *Country Life*, p. 222,

appears a letter from Lawrence Weaver, in which he says "the main purpose of the Civic Arts Association is to see that the tablets on which Mr. Clutton Brock shall write for us, may take an architectural or sculptural form worthy of his epigraphic skill and reticence."

Eggers, O. R., and E. H. Rosengarten. Description of suggested design for a victory memorial. (American architect, v. 114, Dec., 1918, p. 671). MQA

Proposed site at Riverside Drive and 110th Street, New York City.

Frankl, P. Kriegergrabmal und Kriegerdenkmal. (Deutsche Kunst und Dekoration, 1916, Jahrg. 19, pp. 431-432.) †MAA

Soldiers' monuments.

French monument to Americans. (Current history magazine of the New York Times, v. 9, part 2, March, 1919, pp. 477-478.)

Monument dedicated Nov. 3, 1918, at Nancy.

Gateway of the nation. (American architect, April 20, 1919, pp. 603-606. plans.) MQA

Describes a plan for a memorial to be located in Battery Park, New York City.

A German cemetery in France. [Four plates of drawings by S. J. Wearing, with text on p. 426.] (Builder, London, May 2, 1919.) †MQA

Great Britain. Royal graves commission. (Fortnightly, v. 111, Jan., 1919, pp. 136-138.) *DA

Communications from "A Soldier's Mother" speaks of the commission's intention to erect uniform headstones and a central monument, and makes a plea for flowering plants.

Haendcke, B. Weltkrieg und Bildnisplastik. illus. (Kunst für Alle, 1915, Jahrg. 31, pp. 73-76.) †MAA

Soldiers' monuments.

Hastings, Thomas. New York's arch of victory. (Architecture, N. Y., April, 1919, pp. 87-88. illus.) †MQA

Jessen, Peter. Kriegergrabmal-Entwürfe der Wiesbadener Gesellschaft für Grabmalkunst. Illus. (Deutsche Kunst and Dekoration, Jahrg. 18, 1915, pp. 267-276.) †MAA

Koch, David. Das Kriegergrabmal. 6 pl. (Plastik, München, 1915, pp. 41-44.) †MGA

La Sizeranne, Robert de. Héros et statues. (L'Art et les artistes, Feb., 1919, pp. 1-3.) MAA

Commented on in *Evening Post* (N. Y.), June 9, 1919.

Lindner, Werner. Denkmäler für unsere Krieger. München: G. D. W. Callwey [1915], 22 p., 1 l., 8 pl. 8°. (Duererbund. Flugschrift, [no.] 139.) EAA

Martyr memorialized; London's Edith Cavell memorial. illus. (Literary digest, v. 57, June 1, 1918, p. 4.) *DA

Memorials of the past and of to-day. illus. (Literary digest, v. 57, June 8, 1918, p. 27.) *DA

Montizambert, G. Our portion at Versailles . . . graves of Canadian heroes. illus. (Canadian magazine, Feb., 1916, pp. 317-320.) *DA

National peace monument. illus. (Art world, v. 9, Oct., 1918, pp. 308-312.) MAA

Proposal to erect in the Pantheon a monument in honor of the French soldier. (New France, v. 3, March, 1919, pp. 418-419.) †DA

Richardson, A. E. Campo Santo on the banks of the Marne. [Design for suggested memorial to British soldiers who fell in the Battle of the Marne.] Plate, with text. (Builder, London, v. 110, Feb. 4, 1916, p. 106.) †MQA

Soldatengräber und Kriegsdenkmale. illus. (Kunst und Kunsthandwerk, Wien, Jahrg. 18, 1915, pp. 279-296.) †MNA

Soldaten-Gräber, Krieger-Denkmäler, Erinnerungszeichen. Entwürfe und Vorschläge hrsg. vom Bayerischen Kunstgewerbe-Verein, München. illus. (Kunst und Handwerk, Wien, 1916, pp. 65-175.) †MNA

Steinlein, S. Unsere Arbeit fürs Ganze. Kriegergräber und Denkmale. 12 pl. illus. (Plastik, München, 1915, pp. 1-8, 17-28.) †MGA

Studniczka, Franz. Die griechische Kunst an Kriegergräbern: Vortrag, 6 Feb. 1915. (Neue Jahrbücher für das klassiche Altertum . . . Berlin, Bd. 35, 1915, pp. 285-311, 24 pl. illus.) NAA

Victory arch in New York. [Editorial.] (American architect, v. 114, Dec. 4, 1918, pp. 673-674.) MQA

War memorials and rural life. (Veteran, v. 2, Dec., 1918, pp. 47-49.)

War monuments. (Builder, London, v. 108, Jan., 1915, pp. 101-102.) †MQA

"The monuments in English cathedrals and parish churhces . . . for the most part are in excellent taste . . ., but few men desire to see further additions made to the gigantic stone crop, either in Westminster Abbey or St. Paul's Cathedral. . . . The finest monuments in this country commemorate fires and peace achievements rather than the fighting qualities of our ancestors. When we review the number of harbor works . . . at Kingstown, Plymouth, and other ports, it is strange that these works of national importance were not dedicated to the memory of the heroes whose courage . . . made such undertakings possible. . . . No longer must we have inflicted indiscriminate groups of marble and

bronze. . . . There must be a controlling agency. . . . Two or three ideas occur to us. . . . In France battles are seldom commemorated by monuments on the battlefield. Their battle monuments are placed in the centres of towns. . . . Another suggestion is that the deans of cathedrals and rectors of parish churches use authority regarding wall tablets."

Weaver, Lawrence. Memorials and monuments, old and new: two hundred subjects chosen from seven centuries. London: Country life, 1915. 8°. MRI

"The purpose of this book is . . . to focus attention on good examples, old and new. That is not to say that old forms should be copied exactly . . ., but they give valuable guidance as to proportion, use of materials, spacing of lettering and the like. . . . The national conscience is stirred to its depths . . . and it is to be hoped that the memorials will be worthy of . . . the occasion. The book is published in the hope that it may . . . lead to the artist rather than to the trader."

From review in the *Burlington Magazine*, January, 1916: "The most important part of the volume is that which defines the proper relation of the sculptor's and the architect's functions in this form of art. . . . Mr. Weaver pleads for simple memorials . . . and purposely says little of more ambitious monuments, involving groups of statuary."

World-War monuments. (Art world and arts and decoration, v. 10, 1919, pp. 121-128.) MAA

"We are heartily in favor of the . . . community house, but, in addition, a monument of a purely ideal character should be placed near such utilitarian building. . . . There should be absolutely nothing utilitarian about the soldier monuments."

COMMUNITY HOUSES.

Art and war memorials. (Advocate of peace, v. 81, Feb., 1919, pp. 38-39.) †YFXC

"The American Academy of Arts and Letters appealed to the American people to conserve beauty . . . in choice of war memorials. Fortunately in the national capitol a Commission of Fine Arts exists with advisory power. . . . There are a few of the states and cities with similar advisory commissions . . . but taking the country by and large there will be no such expert guidance. . . . Protection from . . . such 'atrocities' as followed the Civil War will be by town officials and citizens who must insist that . . . monuments be erected only after conference with authorities in the realm of art. . . . 'Arches of triumph,' realistic portrayals of war and portrait busts and statues are not going to satisfy the standard of many art patrons and artists. . . . These lovers of art are also lovers of civics. . . . Hence they rather favor the community house, the civic forum, and citizens' town-home as their type of war memorial. To such a structure, the town planner, landseape architect, architect, painter, sculptor, interior decorator, artisan, draftsman, and social service expert all may contribute."

Bard, A. S. Community buildings as war memorials. (National municipal review, Baltimore, March, 1919, pp. 129-135.) SERA

Reprinted in Bulletin 4 of the National Committee on Memorial Buildings.

Brunner, E. D. Soldier memorials in country towns. (American city, town and county edition, v. 20, April, 1919, pp. 345-346.) SERA

Candler, Martha. Community houses as soldiers' memorials. illus. (National magazine, Boston, v. 48, April, 1919, pp. 111-113.) *DA

Discusses opportunities for development of civic architecture, encouragement of music and drama, community kitchen, etc.

Chamber starts campaign for liberty memorial building . . . (Bridgeport Chamber of Commerce, Bridgeport progress, v. 3, Jan. 1, 1919, p. 1.)

Cheney, Charles H. The war memorial—shall we make it something worth while? illus. (Architect and engineer of California. v. 55, 1918, pp. 39-46.) MQA

Community buildings as soldier memorials. (School life, Washington, v. 2, Jan. 16, 1919, p. 1.) Room 111

Community houses instead of monuments, as soldiers' memorials. (American city, town and county edition, v. 19, Sept., 1918, p. 173.) SERA

Crane, Frank. Liberty buildings. (American city, town and county edition, v. 19, Nov., 1918, p. 347.) SERA

Cravath, Paul D. Liberty buildings are the real memorials for the new democracy. illus. (Touchstone, N. Y., vol. 5, July, 1919, pp. 294-302, 336.) *DA

"There is one feature which would seem to belong in any building of memorial character. That is a Hall of Fame wherein should be inscribed the names of those local soldiers, sailors, and marines who participated in the war. . . . There is no standard type of Community House. Let us hope there never will be. . . . Music, the drama, painting, and sculpture . . . must find their home in the building on a friendly footing with other activities. . . . The native arts of our foreign elements we may well use for the enhancement of any community program."

Franklin, M. S. A civic type of war memorial proposed for the city of Boston. (American architect, Feb. 19, 1919, pp. 259-268. plan, diagr.) MQA

"The large city must have many 'community centers'. . . . The up-to-date American city, however, requires some large central structure . . ., the educational, recreational and social headquarters for city and state."

The plan, by Frank Chouteau Brown, lays "emphasis upon the auditorium features." See also *Current Affairs*, Boston. Feb. 17, 1919, p. 7.

Greeley, W. R. Erecting memorials to our soldiers and sailors. plans. (House beautiful, Chicago, v. 45, Jan., 1919, pp. 18-19.) †MLA

Harriman, L. B. Your home town first, the community building as a popular memorial. illus. (Delineator, v. 94, May, 1919, p. 20.) †VSA

How to work for community theatres as soldiers' memorials. (Drama League Monthly, v. 3, Jan., 1919, pp. 10-14.) NBLA

Inspiring memorial buildings proposed or under way. (American city, v. 20, April, 1919, pp. 324-325.) SERA

The "Liberty Building" idea. (American city, city edition, v. 19, pp. 255-266.) SERA

"The erection of more monuments or statues . . . would be an inadequate tribute to a glorious sacrifice. To help the living while commemorating the dead is the purpose of the . . . Liberty Building."

"Liberty Buildings" as soldiers' memorials. (New Jersey municipalities, v. 2, Oct., 1918, pp. 241-242.) SERA

Liberty buildings as victory monuments. (American city, v. 19, Dec., 1918, pp. 471-473.) SERA

Memorial buildings: their place in the community. "Liberty" should be part of their title, one writer says. (Toledo city journal, v. 4, Jan. 4, 1919, p. 5.) SERA

"To honor the living equally with the dead, such a community center affording meeting place for fraternal and recreation organizations, women's clubs, boy scouts [etc.]. So broad a plan would not be desired in Toledo, because it would duplicate many activities already organized, but in many smaller cities the building could play a most important part."

Municipal, community, and memorial buildings. (Municipality. Madison, Wis., March, 1919, pp. 49-52.) SERA

Nation-wide movement for liberty buildings. (Birmingham. Chamber of Commerce. v. 1, Feb., 1919, p. 5.) Room 111

National Committee on Memorial Buildings. Bulletins. New York, 1919. CLIPPING COLLECTION, ROOM 229.

1. Community houses as soldiers' and sailors' memorials, by E. R. Shippen. Provision for art, music, and drama in liberty buildings, by C. W. Stevenson. Memorial building movement has already gained nation-wide interest. Reports from cities.
2. A living memorial.
[3.] The memorial community house. What it should be, and who should manage it.
4. Community houses as war memorials. [By A. S. Bard. Reprinted from National Municipal Review, March, 1919.]
This National Committee is now the Bureau of Memorial Buildings of the War Camp Community Service, 124 E. 28th Street, New York City. *See below, under* War Camp Community.

Proposed liberty memorial square and civic center for Berkeley, California. illus. (American city, city edition, v. 20, May, 1919, pp. 428-429.) SERA

Rigaumont, V. A. Liberty building proposed for the city of Johnstown, Pa. illus. (American city, city edition, March, 1919, pp. 222-223.) SERA

Shippen, E. R. Community houses as soldiers' and sailors' memorials. illus. plans. (American city, v. 20, Jan., 1919, pp. 27-31.) SERA

Some cities which have taken definite steps toward securing community houses or liberty buildings as victory memorials. (American city, v. 20, Jan., 1919, pp. 36-37.) SERA

Stevenson, Christine W. Provision for art, music and drama in liberty buildings. (American city, v. 20, Jan., 1919, pp. 32-35.) SERA

Suggests "liberty buildings." (Harlem magazine, v. 7, Dec., 1918, p. 8.) TLA

War camp community service backs memorial building movement. National Committee on Memorial Buildings unites with War Camp Community Service. (American city, city edition, v. 21, July, 1919, p. 30.) SERA

See also, above, under NATIONAL COMMITTEE.

TREES.

Faxon, R. B. Roadside planting as a memorial to our soldiers and sailors. illus. (Modern city, Baltimore, v. 4, March, 1919, pp. 10-13.) †SERA

Memorial trees planted for soldiers and sailors. (American forestry, March, 1919, pp. 913-917. illus.) VQN

Shorter notes have appeared in this magazine, e. g.: "Washington's first memorial tree," illus., April, 1919, p. 484; "Enthusiasm for memorial trees," February, 1919, p. 863; "Memorial trees for our soldier dead," December, 1918, p. 728.

Monuments with a meaning. illus. (American forestry, May, 1919, pp. 1045-1049.) VQN

"The memorials of this war are not going to be the 'meaningless mausoleums and monuments' which Col. Roosevelt condemned, but they will typify service and sacrifice . . . through parks, community centers, memorial drives and roadways, and similar city, town, and county betterments. Tree planting is a feature of most of the memorials." [Numerous instances given.]

Pack, C. L. Trees as memorials to the country's soldiers and sailors. illus. (National service, N. Y., v. 5, Feb., 1919, pp. 74-77.) VWA

Ridsdale, P. S. Tree planting an important part of city reconstruction programme. (American city, v. 20, Feb., 1919, pp. 189-191.) SERA

Secrest, E. Tree memorials for fallen heroes. illus. (Ohio Agricultural Experiment Station. Monthly bulletin, v. 4, Feb., 1919, pp. 52-54.) VPG

Tabor, G. Memorial trees. illus. (New country life, N. Y., v. 36, May, 1919, pp. 33-35.) †MVA

Trees and forests as war memorials. (New York Times, June 1, 1919, magazine section.) *A

Trees for memorials. illus. (American forestry, Jan., 1919, pp. 779-781.) VQN

"It is the aim of the American Forestry Association to register all such trees planted."

Trees to keep green the memory of our heroic dead. (Literary digest, v. 59, Dec. 28, 1918, p. 32.) *DA

MISCELLANEOUS.

Anderson, O. W. D. Memorial playground. (Parks & recreation, v. 2, Jan., 1919, pp. 51-52.) ROOM 111.

Bookman, N. Y., May, 1919, p. 374.

"The suggestion of a public library as a memorial to local soldiers and sailors who lost their lives in the great war has been taken up with enthusiasm in some twenty or more cities, particularly in the south."

Charing Cross Bridge. (Builder, v. 110, June 23, 1916, pp. 449-450, 455.) †MQA

Deals with improvement scheme by D. Barclay Niven and T. Raffles Davison, with war memorial chapel suggested by C. Lewis Hind. "An improvement urgently needed for practical purposes; at the same time a better memorial than anything else."

The Commemoration of great events. (Architect, London, v. 101, 1919, pp. 197-199.) MQA

"The greatest of war monuments in London is Waterloo Bridge. . . . A new bridge at Charing Cross would most fittingly form London's commemoration of the end of this war. . . . The bridge is needed . . . In most of our cities and towns there is a similar need which might find worthy expression. . . . We canot agree with those who contend that a true memorial should commemorate or express abstractions of thought, and should not serve a practical purpose."

[Communication from the president of the University of Utah, concerning a proposed memorial building to be erected on the campus.] Utah Senate, Jan. 17, 1919, pp. 6-8.

Connoisseur, Aug., 1918, suggests tapestry. †MAA

Cram, Ralph Adams. War memorials. (Architectural Record, v. 45, 1919, pp. 116-117.) MQA

"The best and most significant memorial is the votive church; but what is the use of talking of this now? . . . No, the monuments must be secular. . . . I sometimes think the best thing would be to recreate some one of the destroyed monuments of France or Belgium or Italy."

Douglas, O. W. Playgrounds and recreation centers as memorials. (American city, Feb., 1919, p. 187.) SERA

Ellis, A. Leo. The proposed Telegraph Hill memorial, San Francisco, Cal. (American architect, v. 114, 1918, p. 730.) MQA

"The memorial . . . embodies a wireless telephone and telegraph station."

Garden of the Allies: an eternal garland for graves of the brave. illus. (Touchstone, N. Y., v. 4, March, 1919, pp. 445-452.) *DA

"'I would like to see,' said Sir John Fraser, 'the flowers of America growing over where lie so many of our gallant sons.' . . . Surely no more fitting memorial could be given our fallen heroes than to strew the fields of battle with the flowers they loved, and to plant over the scarred wastes forests of trees. . . ." A similar plea for flowering plants is made in *Fortnightly*, January, 1919.

Leighton, H. B. A parish hall and institute as a war memorial. (Builder, London, v. 116, 1919. p. 373.) †MQA

Leslie, Shane. Lest we forget. (Tablet, London, v. 125, April 24, 1915, p. 522.) ††ZLF

Proposal for fitting up a side chapel of the Catholic eathedral in memory of Catholics who have fallen in the war.

Mullgardt, Louis C. Proposed soldiers' memorial for San Francisco. (Architect and engineer of California, Feb., 1919, pp. 82-83.) MQA

"The memorial should possess five principal elements—a Library of War Records, a Hall of War Illustrations, an Art Gallery of War Paintings, an Assembly Hall for display of War Motion Pictures and for War Lectures. These four will give true expression of the unjustifiable horrors of war . . . the utter futility of human conflict. The fifth element should be an Inner Court. In this garden court an audience may be entertained with orchestral music or other forms of aesthetic entertainments expressive of the higher life."

Proposed victory building at Springfield, Mass. (American architect, March 26, 1919, p. 454.) MQA

Building to house post office, custom house, district court, etc.

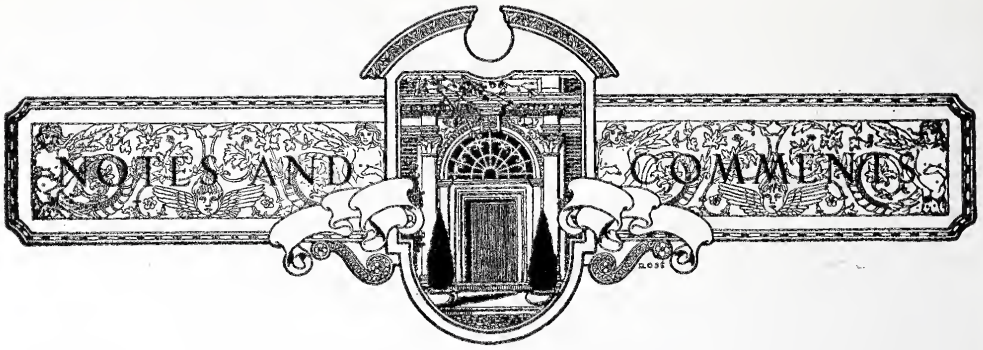
The "Via Sacra" or memorial road. (Spectator, London, v. 116, April 1, 1919, pp. 428-429.) *DA

"We propose that a wide Memorial Road be laid out in No-Man's-Land . . . from the sea to the Alps, with monuments to the fallen and to deeds of heroism."

War memorial advisory committees; memorial playground, by O. W. Douglas. (New Jersey municipalities, v. 3, Jan., 1919, p. 12.) SERA

War memorial proposed by Chamber [of Commerce]. (Current affairs, Boston, Feb. 17, 1919, p. 7. illus.) TLA

View of suggested war memorial building in the Public Gardens.



Wallace Clement Sabine.

Seldom has the professional contribution of one man equaled that of Wallace Clement Sabine, of Harvard University. In architectural acoustics he was pre-eminent; and his life work lies at the basis of what is to be further accomplished in this most important line of scientific research.

In the construction of buildings the element of chance has always entered where rooms for the purpose of spoken or musical performance have formed an important part of the scheme. Great theatres and opera houses, auditoriums and concert halls have been built with much less of a feeling of certainty with regard to their success acoustically than in respect to their beauty of design, practical planning and permanent construction. Professor Sabine, by his experiments of a definitely practical nature, has made it possible for architects to avoid certain roads which lead to failure; and with respect to materials of construction he established many facts whose existence had not been realized.

The immensity of the task he undertook is hard to grasp; its difficulty of execution is so great and the mere establishment of the method of approach to it so full of imagination that not the least remarkable point of consideration is that one lifetime, and that a lifetime prematurely ended, should leave as its record both a well laid out scheme for an exhaustive investigation and a goodly part of its accomplishment.

One phase merely of the question is the coefficient of absorption of the various materials which go into the construction of auditoriums. There occur the myriad combinations arising from the coefficients of absorption of various materials for the various sounds of every pitch. Five years alone were devoted to the determination of the coefficients of absorption for sounds having a single pitch, that of Violin C. Some idea of the intricacy of the work is given by the statement that such an investigation must, for all practical purposes, cover the whole range in pitch of the speaking voice and musical scale related to the various materials of construction.

In detail were taken up the various materials which form the walls and ceilings of large rooms—brick and cement, wood, plaster and tile in combinations usually met with in practice. It was discovered that the absorption of sound by walls was structural and not superficial, thus exploding the theory of a roughened wall as an acoustic corrective, and establishing the fact that the fundamental process of sound absorption is the yielding of the walls. The investigation next determined the absorbing quality of the chairs and audiences, and next that of the various fabrics which could be used in correcting already existing faults. Felt was found to have the greatest powers of absorption for the lower register and its use has been widespread. In co-operation with one of our most enlightened manufacturers, Prof. Sabine's experiments were successful in leading to the evolution of an absorbent tile, widely used now in vaulted churches and auditoriums, whose absorbing power is ten times that of any existing masonry construction and one-third of the absorbing power of the best known felt.

For a correct placing of all this absorbent material an accurate knowledge was necessary of the action of the sound, its direction and points of greatest intensity. Often its direction has to be controlled and definite rules of proportion for great rooms have been established.

To mention only two rooms, corrected of acoustic defects by Prof. Sabine, the lecture hall of the Metropolitan Museum of Art and the auditorium of the Century Theatre are both accessible to the public.

Professor Sabine's authority in his chosen work was recognized abroad. In 1916-17 he was exchange professor at the University of Paris, at which time he was invited to lecture at the Ecole des Beaux Arts and before the Society of Architects, the latter presenting him with a medal in recognition of his work. In England, during a visit there, he was put on a committee to inquire into the acoustic conditions in the House of Commons.

A laboratory, designed by him for the study of a number of specific problems which he had been unable to take up through lack of adequate facilities, was built for him by his friend, Col. George Fabyan, and ideas which he left in his notes and unpublished papers will form the basis of continued experiment in this laboratory.

CHARLES OVER CORNELIUS.

A War Rendering of Ypres.

The great Canadian War Memorial Exhibition, on view at the Anderson Galleries, possesses interest not merely as a collection of virile work, but as a concrete record of the psychological reaction of war on esthetic expression.

It introduces us to the most recent forms of European interpretation, in which the shadow of death and hideous recollection supplant the equable mental poise which our prejudice has hitherto regarded as prerequisite to beauty.

No other war exhibition yet shown in New York has revealed so fully the capacity of art to give a moral reflection of a colossal disaster; the prevailing state of mind of these artists, which controlled their manner of statement, shows this even more clearly than the horror of the incidents depicted.

An architect wandering through the gal-



Copyright, 1919, by Canadian War Memorial Exhibition.

A WAR RENDERING OF YPRES PAINTED IN OILS BY MAJOR J. KERR LAWSON. EXHIBITED AT THE CANADIAN WAR MEMORIAL EXHIBITION.

leries will note with satisfaction that when the eye of the artist has rested on the beauties of ancient structures, however battered by shell, his brain, for the moment, has been capable of normal conception. Fragments of Ypres stand serene in warm sunshine against a beautiful sky.

Major J. Kerr Lawson has treated this subject under the influence of the day with strength and skill, free from the prevailing morbidity; his rendering of detail has great scenic value, and the excellent planning of masses of light and shade should be of particular interest to American architects, who at the present moment show little capacity in that direction.

The directness and frankness of his statement indicates the mental process of the modern soldier—truth without elaboration—a relief from the theatrical swashbuckling typified in Detaille.

Destruction, in this picture, sounds a new note, bearing no kin to the romantic decay so inspiring to Prout and his school, or to the ruins favored by Henri Robert as scenic accessories to paddling nymphs.

The distinguished British author, critic and connoisseur, Mr. Paul G. Konody, was deputed by his Government to commission the artists and direct their work, to form this national collection for Canada. He is to be complimented on the admirable manner in which he has arranged the show.

LEON V. SOLON.

The oldest and youngest of American Schools of Architecture.

It is usually supposed that the Massachusetts Institute of Technology was the first institution to establish professional instruction in architecture. In continuous maintenance of such instruction it has indeed seniority, but it yields to several other institutions in priority of establishing architectural instruction. A first, abortive attempt was that of Quesnay de Beaurepaire, in his Académie des Sciences et Beaux-Arts, instituted at Richmond, as a bond of Franco-American union, in 1789. Although the French Revolution stifled it barely at its inception, that was not before Quesnay had sent to America—as Mr. Wells Bennett has shown—the first highly trained French professional, Stephen Hallet. In 1814, Jefferson, in the outline which formed the basis of instruction at the University of Virginia, proposed as the first of the professional schools a department of fine arts, embracing civil architecture, gardening, painting, sculpture, and the theory of music. When the charter was adopted in 1819, architecture appeared, strangely though it might seem to us, among the subjects to be taught by the professor of mathematics! This was not merely because statics and descriptive geometry fell in the field, but because in that day classicism was at its height, and exactness of proportion was held to be the capital merit, while architecture was considered within the scope of every highly cultivated intelligence. Sir Christopher Wrenn himself had come to architecture as a professor of mathematics. The first incumbents of the chair at Virginia, Thomas Hewett Key and Charles Bonnycastle were men of wide culture. That they sought to inculcate some knowledge of basic architectural principle, by precept as well as by the example of the classic buildings of the University, may go far to explain the persistence of good architecture in the antebellum mansions of the South.

The Confederate War and increasing specialization brought an end to this, and transferred the leadership for the time, to the victorious North. Now, however, an alumnus of the University of Virginia, Mr. Paul G. McIntire, of New York, has provided a generous endowment for the re-establishment there of the school of art, architecture and music. Professional instruction in architecture will begin in the fall, in charge of Prof. Fiske Kimball, formerly of the University of Michigan. The pavilions of the original classic group of buildings will once more serve, as Jefferson wrote, "as specimens for the architectural lecturer." The splendid new buildings by Stanford White, the sculptures of Houdon, Bitter, Borglum, Shrady, Keck, and Aitken, which make without question the most harmonious ensemble in America, will come into their own as a background for instruction in the five arts. Thus the University may bring to the new South as to the old, the knowledge, love and patronage of the best in classic and modern art.

The Architectural Record

October 1919



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A BULLDOG'S GRIP

is No More Relentless than Bishopric Board's Grip on Stucco and Plaster

WHEN a bulldog grips in deadly earnest he never lets go. His powerful jaws close like a vise and never relax their hold until the end has been accomplished.

But whereas a bulldog's grip is governed by physical laws and finally must yield to exhaustion, the grip of Bishopric Board upon Stucco and Plaster is unceasing. Its dovetailed key holds Stucco for generations. There is no strain upon any one part of the Board because the breaking joint method of application distributes the strain over the entire wall area.

A Bishopric Board base usually makes the difference between handsome, enduring walls and walls that crack and crumble after a season or two. Its inexorable grip holds walls and columns secure and keeps them whole, and beautiful.

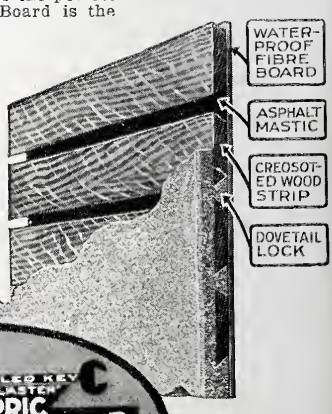
Bishopric Board is firm and strong. Its heavy wood strips are creosoted and imbedded in Asphalt Mastic. Creosote and Asphalt Mastic are wonderful preservatives, and prevent warping, swelling and shrinking. Moreover, the Mastic is moisture-proof and fire-resisting. And the waterproofed fibreboard background keeps out heat and cold and deadens sound.

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THE ARCHITECTURAL RECORD

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Business Manager: J. A. OAKLEY

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Yearly Subscription—United States $3.00—Foreign $4.00—Single copies 35 cents. Entered May 22, 1902, as Second Class Matter, at New York, N. Y. Member Audit Bureau of Circulation.

PUBLISHED MONTHLY BY
THE ARCHITECTURAL RECORD COMPANY
115-119 WEST FORTIETH STREET, NEW YORK

F. T. MILLER, Pres. W. D. HADSELL, Vice-Pres. J. W. FRANK, Sec'y-Treas. E. S. DODGE, Vice-Pres



FIG. 1. DETAIL—RESIDENCE OF H. BELLAS HESS, ESQ.,
HUNTINGTON, L. I HOWELLS & STOKES, ARCHITECTS.

THE
ARCHITECTVRAL
RECORD

VOLVME XLVI NVMBER IV

OCTOBER, 1919

The American Country House



By Fiske Kimball

BY the "country house" in America we understand no such single well-established form as the traditional country house of England, fixed by centuries of almost unalterable custom, with a life of its own which has been described as "the perfection of human society." Even in England today the great house yields in importance to the new and smaller types which the rise of the middle classes has strewn over the country and on the fringes of the city, and with the variety is infinite, from the dwellings of the further suburbs to the distant, self-sustaining estate. Yet the common characteristic of all is clear enough—a site free of the arid blocks and circumscribed "lots" of the city, where one may enjoy the informality of nature out-of-doors.

Much as has been written on the subject, we are still far from having any such fundamental analysis of the American country house of today as that which Hermann Muthesius in his classic book "The English House" has given for England. Perhaps the reason may be that we have taken too much for granted and should try, as Muthesius does, to look on the work more with the eye of a stranger.

Things we never mention are in many cases the very ones which go farthest to make the specific architec-

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FIG. 2. DETAIL VIEW—RESIDENCE OF JOSEPH BUSH, ESQ., FIELDSTON, NEW YORK CITY, DWIGHT JAMES BAUM, ARCHITECT.



FIG. 3. SUN ROOM—RESIDENCE OF J. B. RICHARDSON LYETH, ESQ., FIELDSTON, NEW YORK CITY. DWIGHT JAMES BAUM, ARCHITECT



FIG. 4. ENTRANCE DETAIL—RESIDENCE OF DR. EDWARD B. KRUMBHAAR, WHITEMARSH VALLEY, PA. ARTHUR H. BROCKIE, ARCHITECT



FIG. 5. VIEW FROM THE SOUTH—RESIDENCE OF STEWART DUNCAN, ESQ., NEWPORT, R. I.
John Russell Pope, Architect.



FIG. 6. RESIDENCE OF TRACY DOWS, ESQ., RHINEBECK, N. Y.
Albro & Lindeberg, Architects.



FIG. 7. "THE MANOR HOUSE," ESTATE OF JOHN T. PRATT, ESQ., GLEN COVE, L. I.
Charles A. Platt, Architect.

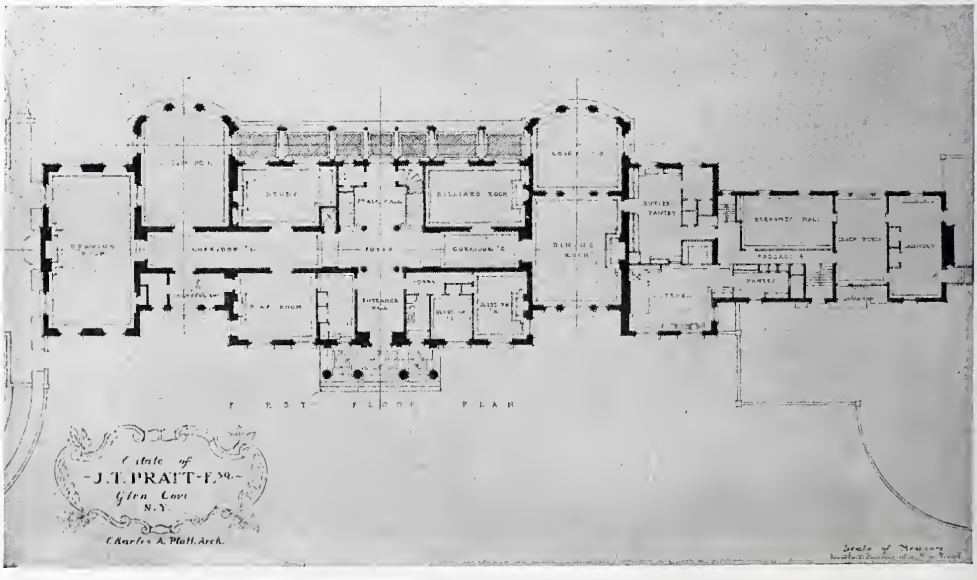


FIG. 7A. FIRST FLOOR PLAN—"THE MANOR HOUSE," ESTATE OF JOHN T. PRATT, ESQ., GLEN COVE, L. I.
Charles A. Platt, Architect.

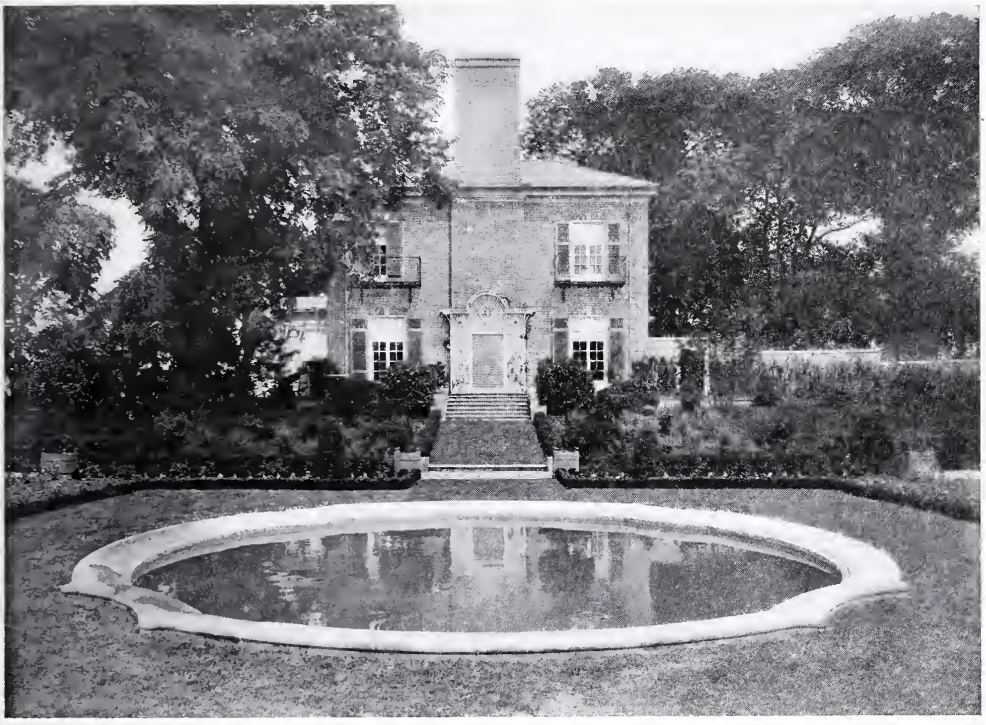


FIG. 7B. VIEW FROM GARDEN—"THE MANOR HOUSE," ESTATE OF JOHN T. PRATT, ESQ., GLEN COVE, L. I.
Charles A. Platt, Architect.

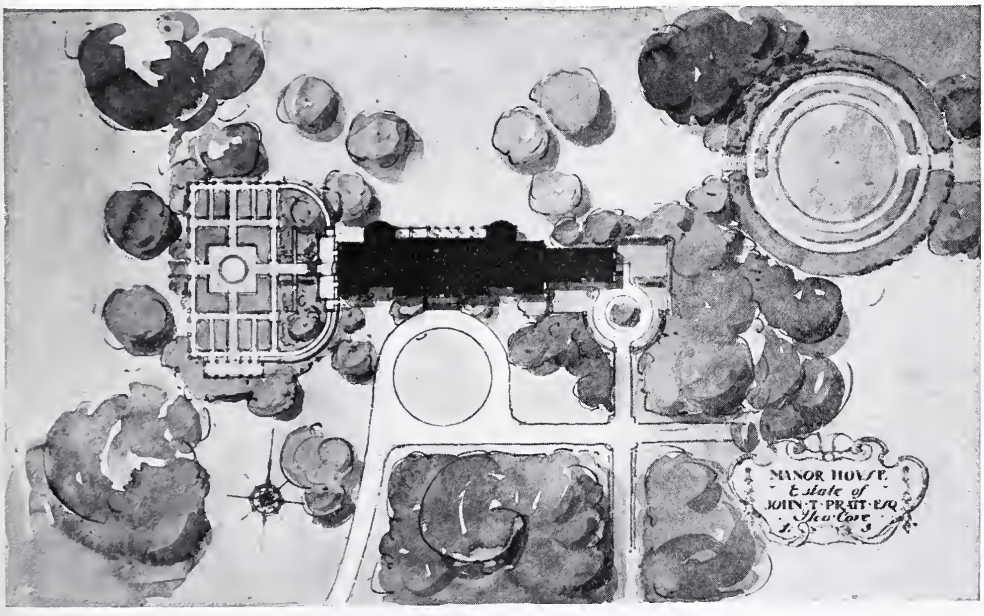


FIG. 7C. GENERAL PLAN—"THE MANOR HOUSE," ESTATE OF JOHN T. PRATT, ESQ., GLEN COVE, L. I.
Charles A. Platt, Architect.



FIG. 8. RESIDENCE OF JAMES SWAN FRICK, ESQ., GUILFORD, BALTIMORE, MD.
John Russell Pope, Architect.

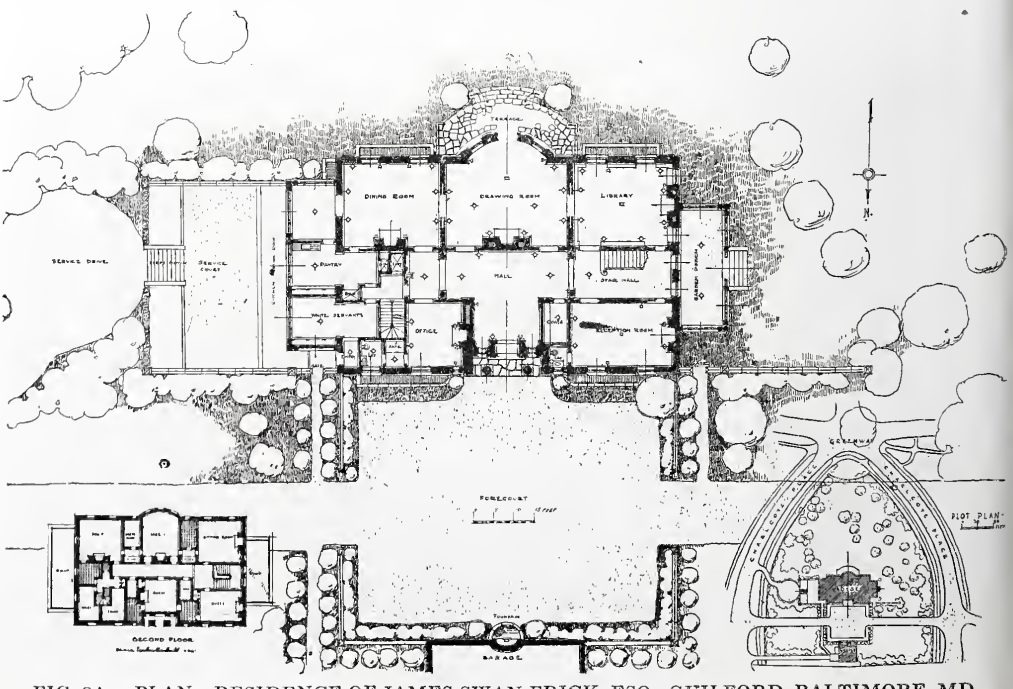


FIG. 8A. PLAN—RESIDENCE OF JAMES SWAN FRICK, ESQ., GUILFORD, BALTIMORE, MD.
John Russell Pope, Architect.

tural and domestic character which we recognize intuitively as American. A search for these basic conditions and elements cannot fail to bring us greater clarity of thought in our domestic design, and help make conscious and direct the adaptation which tends to remain merely intuitive and groping.

Let us, then, apply to our own problem of today the same thoroughness of analysis which has been so successful in helping us to understand past styles, but which we have usually been content to drop at the year 1800: seeking, first, the bearing of the practical conditions, natural, economic, social, next, the bearing of artistic conditions, the traditions and tendencies of style; and, with the insight thus won, examine the prevailing types and recent examples.

1- Practical Conditions

- Natural - Economic - Social -

So far as concerns natural conditions, certain diversities are so obvious that it might seem impossible to formulate generalizations such as are readily made for a homogeneous country like England. Closer examination, however, reveals much underlying unity with respect to all but a few exceptional districts: semi-tropical Florida, the deserts of the Southwest, and the temperate Pacific Riviera.

In climate, the fundamental characteristic is a range of temperature out of all proportion to Western Europe. Whereas there the difference between the means of January and July is but ten or fifteen degrees, as on our Pacific coast, throughout the rest of the United States the mean annual range is immensely greater, seventy degrees in the northern prairies and plains, and forty or fifty degrees even along the Atlantic seaboard. As summer temperatures of a hundred degrees are occasionally carried to the Canadian boundary and freezing winds sometimes sweep down to the Gulf of Mexico, the extreme range is even greater than this would indicate—110° and even 135° in given localities. It follows that building materials are exposed to exceptional conditions of weathering and of expansion, and that unusual provisions of defense must be made to secure comfort both in summer heat and in winter cold. No small share of the greater cost of American buildings in proportion to relative prices abroad is due to this struggle with severity of climate.

In winter freezing temperature not only demands deep foundations and careful protection of plumbing, but also makes central artificial heat an absolute necessity for the plumbing system as well as for the comfort of the inhabitants. The high cost of foundations tends to prevent the house from ramifying and to force it into the air, while the cost of the heating system restricts the open fireplace—still desirable as the best means of ventilation and cheer—to the few principal rooms at most. On the other hand, the development of artificial heating gives us certain advantages that other countries where winter is less drastic do not possess, making the house relatively independent of unfavorable orientation and permitting large openings between the rooms without incurring the foreign bugaboo of draughts. The tendency in the last generation of adequate

heating has been to utilize these possibilities through replacing the more European. Colonial plan of isolated rooms with inside chimneys and closed doors by one with outside chimneys and with rooms thrown together by broad-cased openings.

The heavy and lasting snows of the north have also their influence, by forbidding the horizontal valleys and freedom of roof composition of the English, and by rendering interior courts exotic and unsatisfactory, unless in houses not intended to be occupied in winter.

The heat of summer must be met either by high ceilings or by large openings, both, but especially the latter, again demanding adequate winter heating. The nineteenth century solution, seen most characteristically in mid-Victorian houses, was to use high ceilings with openings relatively small, windows closed and shaded by blinds—on the principle of holding the imprisoned air at its night temperature. The system was satisfactory except for the neglect of one factor, disclosed by the medical science of the turn of the century, sufficient to destroy the whole equilibrium and gradually bring about the wholly different adjustment of today. It was the discovery that tuberculosis flourishes in closed rooms but yields to fresh air and sunlight, with the complementary discovery that malaria comes not from "night air" but from mosquito bites, which threw wide the windows of our houses, gave casement sash a greater vogue, and brought the demand for sleeping porches. At the same time, in view of a prevalence of flies and mosquitos unknown in western Europe, this required complete screening, for safety as well as comfort. In the new houses, where the breeze blows through unrestrained, high ceilings have become unnecessary, and, in all but the most pretentious, have generally given way to low or at least lower studs, in the interest of coziness with economy of first cost and of heating. Blinds, no longer so much used either day or night, and impossible to close with full screens or casements opening outward, have tended to be abandoned, unless retained for reasons of style. Even the forms of porch posts and railings have been affected by the screens, the column and the balustrade tending to be replaced by the square pier and the solid parapet.

Of building materials the natural abundance in most sections has always given a wide range of physical possibilities, and has left the choice to be determined primarily on economic grounds. That the dominant form of construction in America has hitherto been of wood has not been due to special difficulty in securing stone or brick, but to the cheapness of wood itself. In the pioneer settlement and on the Colonial estate timber was actually to be had for nothing as a by-product of clearing the land necessary for tillage, and masonry has remained at a relative economic disadvantage quite unknown in the deforested countries of Europe. With the depletion of our own forests in recent years, however, this disparity has been rapidly decreasing. In 1910 careful investigations showed that the excess first cost in dwelling houses of brick over wood had fallen to ten or twelve per cent. And unless reforestation is carried out on a large scale, it is merely a question of time when the difference shall ultimately disappear. Already products of clay, cement, and metal tend more and more to replace wood at this point or that. Wall coverings of stucco on metal lath, floors of tile composition, girders of steel at crucial points become relatively less extravagant. New materials and structural devices, such as hollow tile for walls, are further reducing the relative expense of masonry construction, and causing an increasing number to assume the added first cost for the sake of greater durability and dignity.

In our more ambitious houses, of course, these motives of preference have always led to the occasional employment of masonry; and, in this, local conditions at first played a large rôle. The clay of Maryland and Virginia suggested brick; the stratified ledge-stone of Pennsylvania, stonework of special technique and texture. Although cheap transportation has tended to make brick and stone of all



FIG. 9. VILLA OF JAMES DEERING, ESQ., MIAMI, FLA.
Paul Chalfin & F. Burrall Hoffman, Jr,, Architects.
(From the Architectural Review for July, 1917)

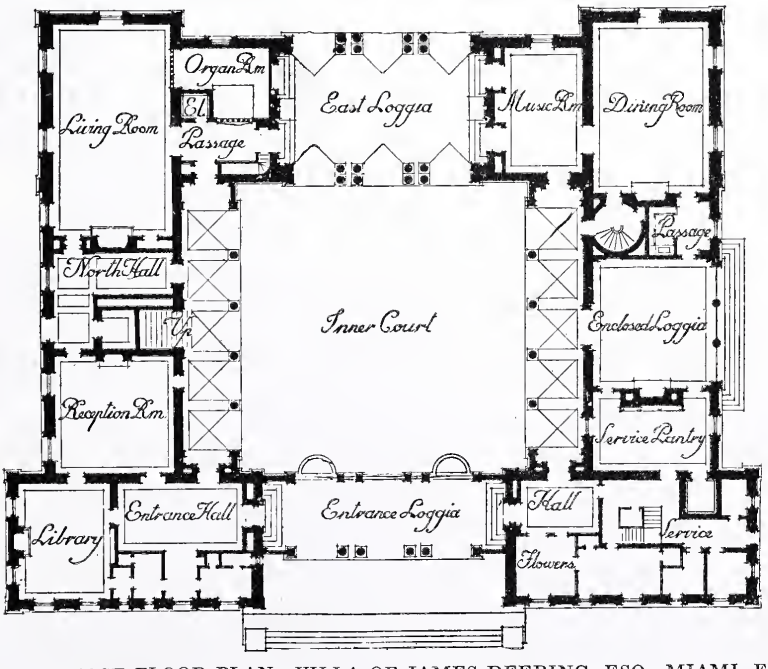


FIG. 9A. FIRST FLOOR PLAN—VILLA OF JAMES DEERING, ESQ., MIAMI, FLA.
Paul Chalfin & F. Burrall Hoffman, Jr,, Architects.
(From the Architectural Review for July, 1917)



FIG. 10A. RESIDENCE OF JOSEPH C. BALDWIN, JR., ESQ., MOUNT KISCO, N. Y.
Benjamin Wistar Morris, Architect.

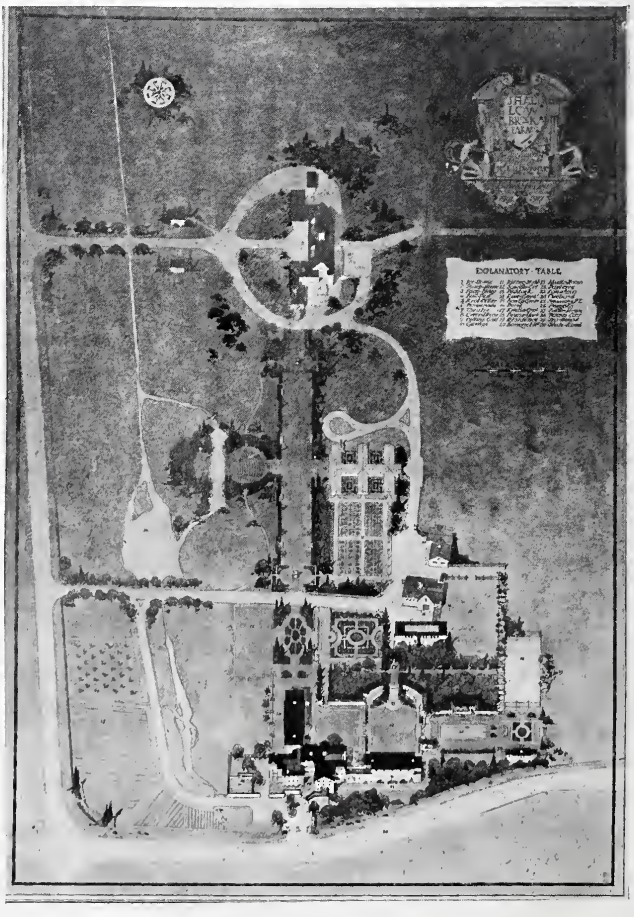


FIG. 10. "SHALLOW BROOK FARM," RESIDENCE OF JOSEPH C. BALDWIN, JR., ESQ., MOUNT KISCO, N. Y.
Benjamin Wistar Morris, Architect.



FIG. 11. RESIDENCE OF JOSEPH C. BALDWIN, JR., ESQ.,
MOUNT KISCO, N. Y.
Benjamin Wistar Morris, Architect.

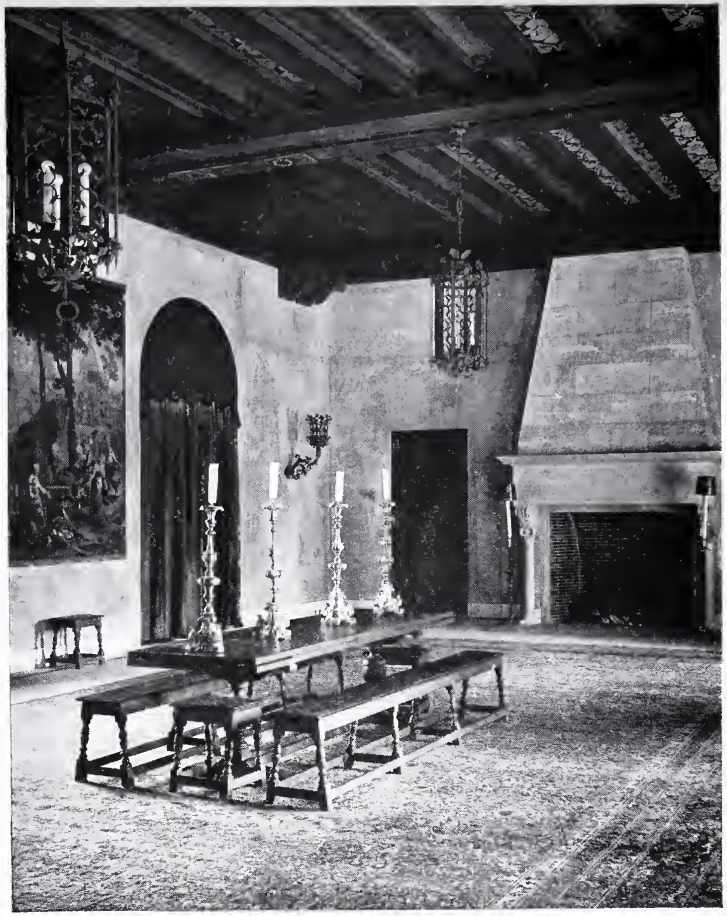


FIG. 11A. RESIDENCE OF JOSEPH C. BALDWIN, JR., ESQ.,
MOUNT KISCO, N. Y.
Benjamin Wistar Morris, Architect.



FIG. 12. RESIDENCE OF THOMAS R. BARD, ESQ., HUENEME, CAL.
Myron Hunt, Architect

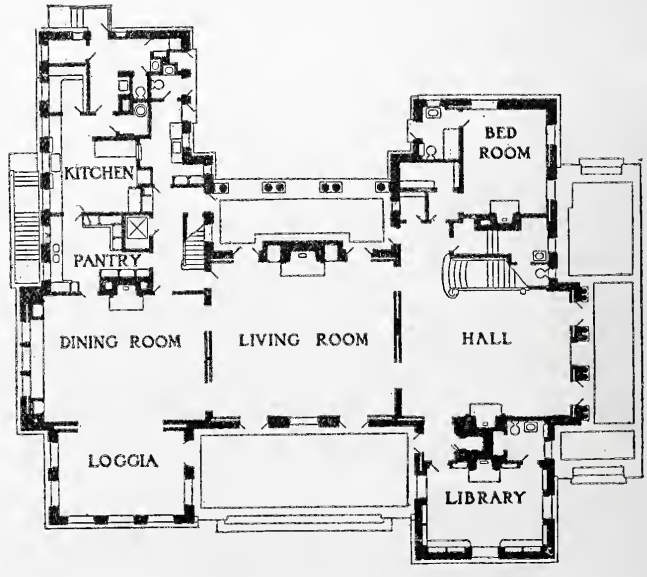


FIG. 12A. FIRST FLOOR PLAN—RESIDENCE OF THOMAS R. BARD, ESQ., HUENEMA, CAL.
Myron Hunt, Architect.



FIG. 13A. ENTRANCE TO COURT—RESIDENCE OF C. A. BARTLETT, ESQ., LAKE GENEVA, WIS.
Howard Shaw, Architect.



FIG. 13B. COURT—RESIDENCE OF C. A. BARTLETT, ESQ., LAKE GENEVA, WIS.
Howard Shaw, Architect.

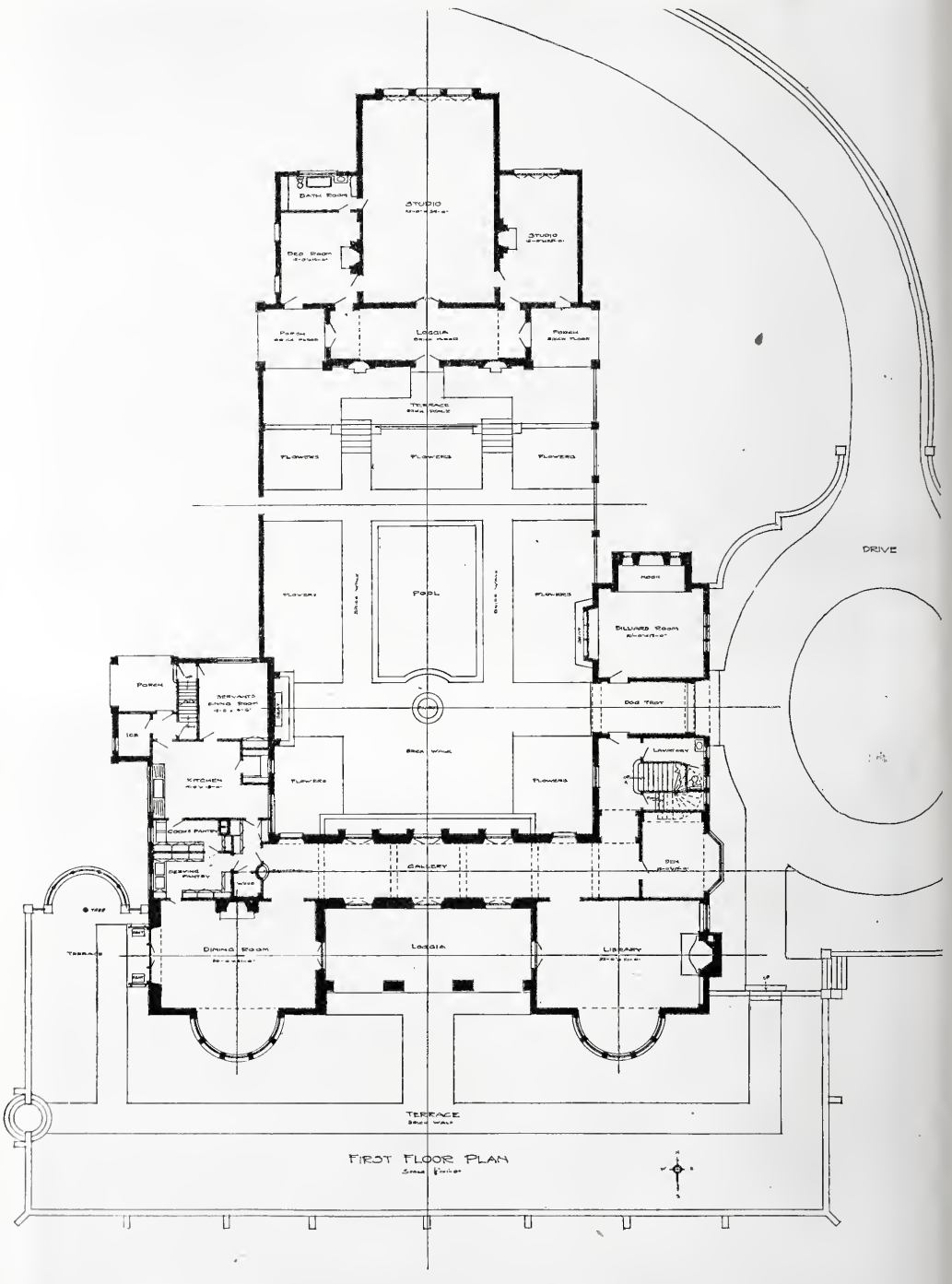


FIG. 13. FIRST FLOOR PLAN—RESIDENCE OF C. A. BARTLETT, ESQ., LAKE GENEVA, WIS. HOWARD SHAW, ARCHITECT.

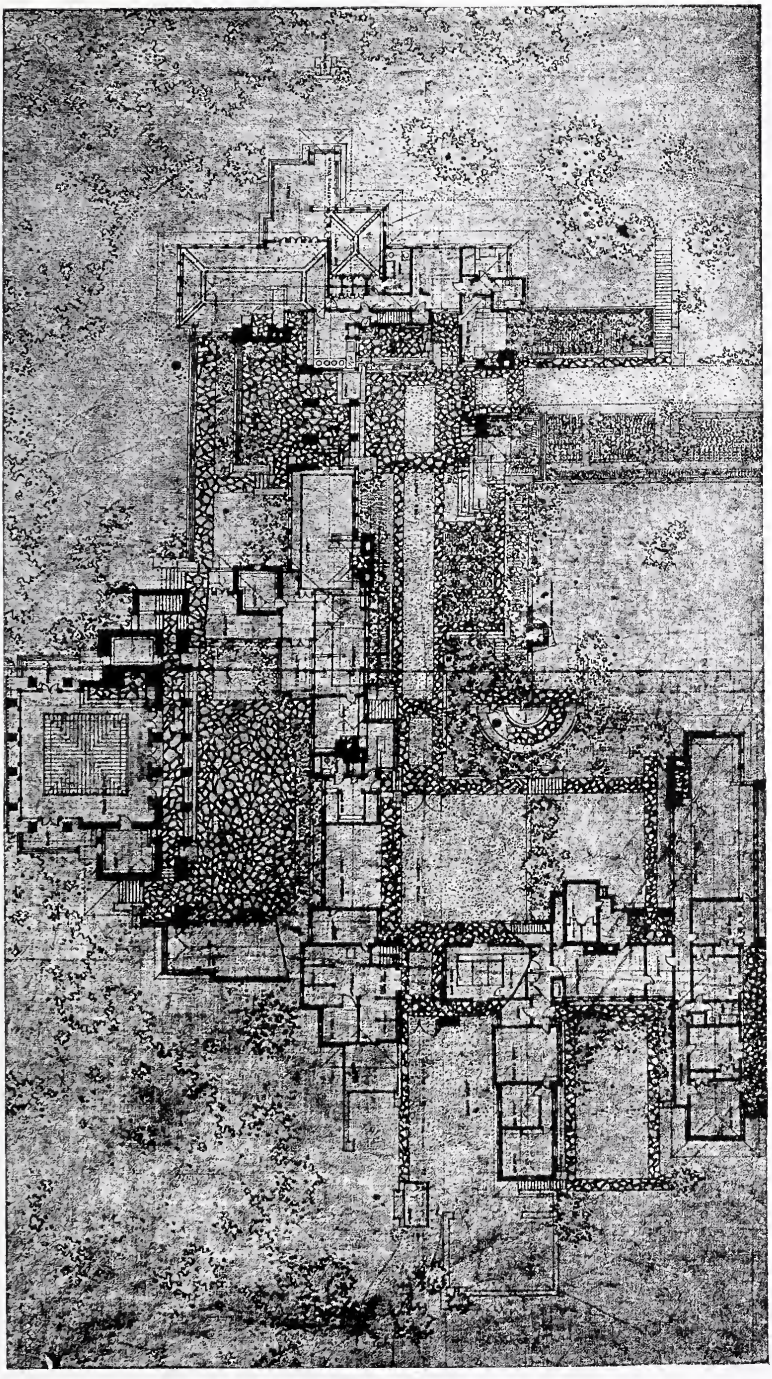


FIG. 14. GROUP OF BUILDINGS ON ESTATE OF FRANK LLOYD WRIGHT, SPRING GREEN, WIS., INCLUDING RESIDENCE, ARCHITECTURAL OFFICE, FARM BUILDINGS, FARMER'S DWELLING AND DORMITORIES FOR EMPLOYEES, FRANK LLOYD WRIGHT, ARCHITECT.

sorts universally and equally available, and fashions of style rather than necessity have thus been able to determine the preference among them, the influence of local supply of materials either on cost or on style is by no means exhausted.

II

Economic conditions, revolutionized by war and still in rapid change, determine both the costs of building and operation and the sum available for them.

Who and how many can build country houses depends ultimately on the distribution of income in the nation. Figures really exact are difficult to arrive at, but the most reliable are these:

Annual Income		Number of families or "income receiving units"		
		1910 (Estimated)*	1916 (Federal tax returns on basis of "net income")	1917
Over	$1,000,000			
$200,000 to	1,000,000	154	206	141
100,000 to	200,000	261	2,243	1,959
50,000 to	100,000	3,145	4,184	4,604
		11,630	10,452	12,439
Total over	$50,000 ("millionaires")	15,190	17,085	19,143
20,000 to	50,000	39,000	36,690	47,197
10,000 to	20,000	73,000	67,926	95,696
6,000 to	10,000	117,000	98,522	
3,000 to	6,000			831,429
		476,000	209,178	
Total over	$3,000	720,190	429,401	993,465
Total families or income receiving units		27,945,190	.....	.....

The smaller numbers in certain classes of incomes in 1916 are not due, of course, to decrease in incomes since 1910, but to deductions exempt from tax and to failure to file returns on the part of those with the smaller incomes. It is notable that in spite of such factors and the inevitable proneness of tax returns to understate the facts, the number of incomes of $100,000 or more in 1916 greatly exceed the estimates of 1910. The striking, almost incredible conditions—verified, however, by a multitude of other evidences — are that the families with incomes over $3,000 constitute but three per cent. of the whole number of families in the country; and that not much over 150,000 families, or one-half of one per cent., have over $10,000 a year. Obviously but a very small fraction of the population is in a position to build country houses of any sort. Equally striking, at the other end of the scale, is the large absolute number of "millionaires," and their rapid increase from the 4,027 shown by the exhaustive investigation of the New York Tribune in 1892—a quadrupling in twenty-five years.

For the time being and for some time to come, it must not be forgotten that the "net income" of the individual suffers a large further reduction by taxes, amounting for 1918 to $830 on an income of $10,000; $11,030 on an income of $50,000; and over $100,000 on an income of $200,000. Even with the reduction of one-third in the normal tax for 1919, these amounts will remain very substantial.

How much of this actual income is available for country house building and operating may be traced by examining budgets for different classes. To begin with incomes as low as $3,000, the apportionment between the five usual groups established by Professor Ellen H. Richards is somewhat as follows:

Food	Rent	Operating Expenses (light, heat, service, etc.	Clothes	Higher Life
25%	20%	15%	20%	20%

*W. I. King: "The Wealth and Income of the People of the United States" (1915), pp. 224-226.



FIG. 15. GENERAL VIEW OF FORECOURT AS SEEN FROM THE GRANARY—ESTATE OF FRANK LLOYD WRIGHT, SPRING GREEN, WIS.
Frank Lloyd Wright, Architect.

For larger incomes the percentage for food and clothes naturally decreases and that for higher life increases, the other proportions remaining much the same. Taking the average rent in any case as 20 per cent. and capitalizing it at ten per cent. to allow for taxes, repairs, and depreciation, we find the amount which might be available for building and operating expenses in different grades of income somewhat as follows:

Annual Income	Annual Rent	—Amounts Available for:— Building (house and land	Operating Expenses
$3,000	$600	$6,000	$450
6,000	1,200	12,000	900
10,000	2,000	20,000	1,500
50,000	10,000	100,000	7,500

With the prices of building in 1914 the country or suburban dwelling of ordinary character and minimum dimensions cost, with the land, roughly a thousand dollars a room. This is on the basis of a rate of 22 cents per cubic foot of habitable space including the basement, or $3 per square foot of floor area above the basement, and allows for but one bath. For each additional bath the allowance would have been some $300, for additional servants' rooms about $500 each. With higher standards of material and finish the expense ranged in 1914 from 30 to 50 cents per cubic foot or $4 to $9 per square foot in country houses of the better classes. Meanwhile costs have risen to entirely new levels. On figures given out by the United States Department of Labor, prices of building materials, excluding metals, have advanced 84 per cent. in the last five years. Owing to the slower rise of wages, to be sure, the advance in the total cost of construction has not been so great. By actual comparison of costs the increase between June, 1915, and May of this year on a two and a half story frame dwelling with stucco exterior, in the vicinity of New York, is 48 per cent. On the basis of present incomes it is easy to see not only why the great mass of city dwellers finds anything like a country house out



FIG. 16. LIVING ROOM—RESIDENCE OF FRANK LLOYD WRIGHT, SPRING GREEN, WIS.
Frank Lloyd Wright, Architect.

of the question, but why many who might have built before the war now find it impossible to do so, even though assured that prices are not coming down.

No less important a factor than the cost of building is the cost of operation. In this the largest element by far is represented by service. Even before the war at an average wage for white maids of seven dollars a week with room and board, and at a cost for board of four dollars, the current expense for female help was some $550 a year per servant. At present wages of ten dollars and upwards, $850 to $1,000 would be a conservative estimate. If the first cost of a thousand dollars or more for a servant's room and bath are considered in addition, it is obvious that in the North, with families of average numbers, even the keeping of a single maid is a burden on incomes less than six or eight thousand dollars. Few of the houses illustrated in this number have provision for more than three servants, on incomes very much larger than that. When it is realized that at the wages prevailing in England before the war it was not abnormal there to keep three servants on an income of a thousand pounds a year, the notable influence of present American economic conditions will be appreciated.

III

Foremost of the social conditions affecting the country house is the very impulse to its building, the great wave of renewed love of out-of-door life and of nature which swept over America in the last years of the nineteenth century and the opening years of the twentieth. Predominant in it, no doubt, is the fondness for out-of-door sports, which have had such an unparalleled development in the last generation; but beside this has come a fuller enjoyment of gardening and the quieter pleasures of country life. To permit the indulgence of these tastes even modern business has had to give way, adapting its organization to vacations and week ends, not only of the executives but of the whole sales and office force.



FIG. 17. COURT—RESIDENCE OF CHARLES A. WIMPFHEIMER, ESQ., LONG BRANCH, N. J. HARRY ALLEN JACOBS, ARCHITECT.

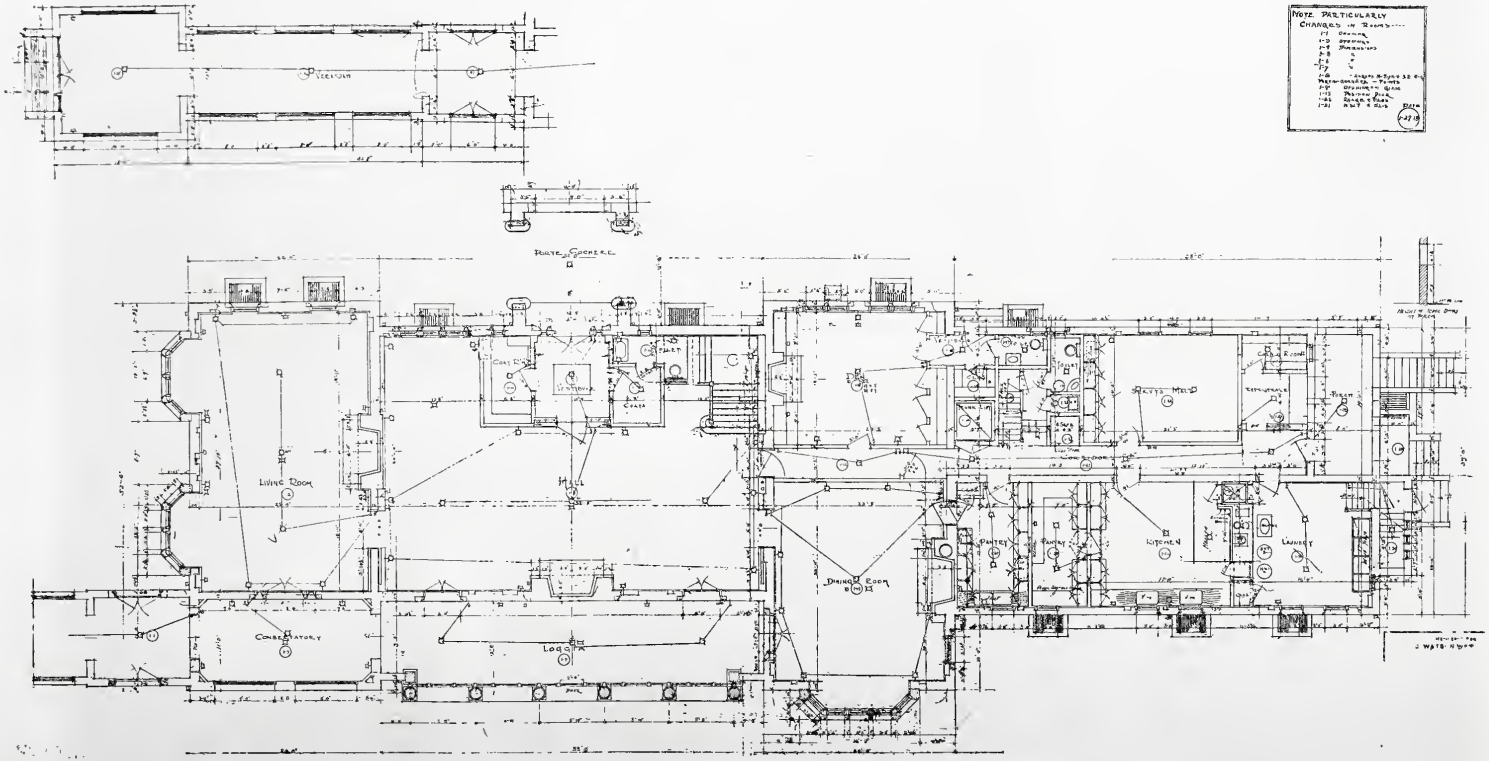


FIG. 18. FIRST FLOOR PLAN—RESIDENCE OF J. WATSON WEBB, ESQ., WOODBURY, L. I. CROSS & CROSS, ARCHITECTS.



FIG. 19. RESIDENCE OF J. WATSON WEBB, ESQ., WOODBURY, L. I. CROSS & CROSS, ARCHITECTS.



FIG. 20 RESIDENCE OF J. WATSON WEBB, ESQ., WOODBURY, L. I. CROSS & CROSS, ARCHITECTS.



FIG. 21. HALL—RESIDENCE OF J. WATSON WEBB, ESQ., WOODBURY, L. I. CROSS & CROSS, ARCHITECTS.



FIG. 22. DETAIL—RESIDENCE OF H. BELLAS HESS, ESQ., HUNTINGTON, L. I. HOWELL & STOKES, ARCHITECTS.



FIG. 23. RESIDENCE OF WALTER B. WALKER, ESQ., ARDSLEY, N. Y. FRANK J. FORSTER, ARCHITECT.



FIG. 24. RESIDENCE OF WALTER B. WALKER, ESQ., ARDSLEY, N. Y.
Frank J. Forster, Architect.

The impulse into the open is strong enough to make a man bear hardships, if necessary, to relish camping, or make the best of living in old farm houses or inadequate shacks. But in its cooler and more permanent moods it is still subject to the imperative demand for modern and American ideals of comfort. A complete water supply, drainage and plumbing system, with special facilities for servants, if any, central heating in winter supplemented by one or more fireplaces, electric lighting, ease of communication and transportation, are our universal requirements, to a large degree independent of income. To make possible enjoyment of country life without the loss of these modern facilities, applied science has devoted itself in recent years with complete success. Gasoline pumping and pressure tanks have insured a constant water supply; long distance transmission and private generating systems have made electricity universally available; rural delivery, the parcels post and the telephone have solved the problem of communication. Most important of all, the automobile and good roads have made transportation over long distances rapid, easy, and pleasant. With over four million passenger cars in the United States in 1918, of which some two and a half million are used in farm and country life, the car is rapidly coming to be considered a necessary, like the furnace, the fixed bath tub, or the telephone.

The result of these ideals and facilities has been the great decentralization of the more favored classes of towns and cities, whether by summer exodus to the seashore and mountains, or by life the year around on the borders of the country or in the country itself.

In determining the main types to which these houses conform, social stratification plays the chief part. It is idle to ignore the reality of existence of social groups in contemporary America in spite of the continuous gradations between them. Our political democracy does not exclude industrial aristocracy, and the war and its aftermath are making the essential cleavage between capitalists, business men and professional

men and the laboring masses, but too pronounced.

Of the classes it is only the first two that come at all into consideration as builders of country houses. Between their dwellings there is a difference more fundamental than disparity of expense grounded on social conventions and mode of life. Whereas in England, with an ancient aristocracy rooted in feudal landholding, the conventions and the historic form of the house alike are native with it and tend to impose themselves on the middle class, with us the middle class conventions are the fundamental ones, to free itself from which our industrial aristocracy tends to have recourse to foreign, especially English, models. This does not exclude, of course, imitation of the reigning social fashion in externals by all classes. Thus it comes about that in the basic form of the American house, however large, the traditions of simpler American society are apt to govern, while in style and decoration the successive modes of the leaders of fashion ultimately prevail even in the modest dwelling.

For the fashionable world, residence in the country is a part of the conventional division of the year, which involves also residence in town during the social season, with visits to Florida or California in the depth of winter and to Mount Desert in the height of summer. By such migrations there is an escape from conditions of climate which the house reflects in its freedom from provision for extremes. In the country house not occupied in winter, an open court becomes feasible, as in the Wimpfheimer house at Long Branch (Fig. 17). The sleeping porch is not needed for comfort, and under favorable circumstances even screens may be omitted, with advantages for picturesqueness testified, for instance, by the open loggias and canopies of the Rogers house on Long Island (Architectural Record for January, 1916). The house of this class, costing a hundred thousand dollars or indefinitely more, is distinguished from the small house less by any greater number of living rooms than by greater amplitude and luxury—a stamp which shows that in its building lavish means were at disposal. There are numerous rooms for house guests and enlarged facilities for entertaining; corresponding provisions are made for the privacy of the hosts through dressing rooms, boudoirs and additional baths; the service arrangements are calculated for a numerous staff; gardens, dependencies and surrounding land are of generous extent, and all rooms, especially the living rooms, of liberal dimensions. While in all this to a large degree it is the old ideal of the English country house which is followed, it is only in a minority of cases, except in the South, that this is carried to the extent of making the estate self-sustaining. Agriculture and stock-breeding as hobbies are rarer here than in England with its feudal background.

The houses of this class in general are of an importance to demand individual illustration and comment, more extended than can be made here. A few examples only, such as the Watson Webb (Fig. 19), Appleton (Fig. 109) and Hess (Fig. 41) houses on Long Island, themselves relatively modest in their pretensions, are shown in some completeness; but otherwise houses like these are discussed merely in so far as they have had influence on the smaller type, principally in matters of style.

For American business and professional men, ideals of life and standards of comfort do not differ so greatly from those of the greater capitalists, but absence of social pretensions permit a more modest establishment, while difference of means enforces certain limitations. Full material conveniences of plumbing, heating, lighting and transport are an absolute requirement, taking unconscious precedent of any other. To them must be sacrificed, if the money available is limited, dimensions and number of rooms, quality of materials, number and very presence of servants, and even size of families. Thus where there is not money for both, the *confort moderne* has brought the loss of the *confort ancien*—the grand dimension, sterling quality,



FIG. 25. RESIDENCE OF J. B. VAN HAELEN, ESQ., HARTSDALE, N. Y. FRANK J. FORSTER, ARCHITECT.



FIG. 26. RESIDENCE OF J. B. VAN HAELEN, ESQ., HARTSDALE, N. Y. FRANK J. FORSTER, ARCHITECT.



FIG. 27. RESIDENCE OF J. B. VAN HAELEN, ESQ., HARTSDALE, N. Y.
Frank J. Forster, Architect.

ample service, hospitality. Although these consequences were scarcely foreseen and not incurred consciously, any voluntary return to former conditions is unimaginable.

The most drastic of these curtailments is in the matter of service. The trouble here is not merely that money is available for only very few servants, or perhaps only one, at present wages; but that this reduced number of servants tend to regard the work as too great and will not stay at all, if indeed the absorption of the limited supply by larger establishments permits any to be secured in the first place. Thus, a constantly greater number of housewives are forced to carry on the work with little help or none at all. In either case the resulting trend is toward a still further reduction in the scale of the establishment, and toward the adoption of laborsaving devices. The vacuum cleaner and many other electrical appliances, recommended also by other advantages, are already very widespread, the dishwasher is rapidly following, with the washing machine and the mangle where commercial laundry service is unavailable or unsatisfactory. Such equipment, of course, brings a large additional increase in first cost, augmented still further by the American readiness to make technical development an end in itself.

This whole development is best seen in the kitchen, which with the reduction of personnel and the substitution of gas and electric cooking, is fast becoming in the North a little galley, bristling like a laboratory with technical devices. In the South, negro help earning lower wages and also of less technical capacity perpetuates, on the whole, the conditions of an earlier day.

In the ordinary business and professional circles two establishments are the most that can be afforded, and the pressure is to emphasize but one, or even to concentrate wholly on one, especially if the advantages of both city and country can be secured there. For some whose occupation or retirement permits, a per-

manent residence in the country is possible. For those whose occupation is in the city, two schemes for enjoyment of country life are practicable: a house at some distance used for vacations and week-ends, in connection with a house or apartment in town, or a house on the outskirts of the further suburbs with daily trips to the city by rail or motor. In the former case neither establishment can be as ambitious as if there were but one, and, with the migratory apartment life of cities, the trend is to make the country house principal, to regard it as the true home, occupied by the family continuously during the good weather while its head spends the middle of the week in town. With the large suburban estate, on the other hand, the impulse to spend the summer elsewhere is greatly reduced and the briefer vacation trips may be spent at hotels and camps. Thus, although one type is primarily a residence for the summer, the other for the winter months, heating and other facilities of a permanent residence are introduced into the "summer cottage," porches and related features are multiplied to make the suburban place thoroughly livable in summer, and both become fundamentally one with the permanent country residence.



FIG. 28. RESIDENCE OF J. B. VAN HAELEN, ESQ., HARTSDALE, N. Y.
Frank J. Forster, Architect.



FIG. 31. RESIDENCE OF HORATIO GATES LLOYD, ESQ., HAVERFORD, PA.
Wilson Eyre & McIlvaine, Architects.



FIG. 32. RESIDENCE OF HORATIO GATES LLOYD, ESQ., HAVERFORD, PA.
Wilson Eyre & McIlvaine, Architects.



FIG. 29. RESIDENCE OF HORATIO GATES LLOYD, ESQ., HAVERFORD, PA.
Wilson Eyre & McIlvaine, Architects.



FIG. 30. RESIDENCE OF HORATIO GATES LLOYD, ESQ., HAVERFORD, PA.
Wilson Eyre & McIlvaine, Architects.



FIG. 33. SOUTH FRONT FROM LAWN—RESIDENCE OF DR. EDWARD B. KRUMBHAAR, WHITEMARSH VALLEY, PA.
Arthur H. Brockie, Architect.



FIG. 35. NORTH FRONT—RESIDENCE OF DR. EDWARD B. KRUMBHAAR, WHITEMARSH VALLEY, PA.
Arthur H. Brockie, Architect.

In a suggestive note in the Architectural Record for October, 1914, Mr. Herbert Croly spoke of the large suburban place as a development specifically Middle Western. It is true that the type is necessarily uncharacteristic of New York with its monstrous urban extent, although in Greenwich, Conn., in Westchester County, N. Y., and in Northern New Jersey many examples of such essentially suburban country places might be cited, but about smaller Eastern cities they are very numerous, and should be regarded as characteristic rather of the size of the city than of any particular section. So far as social requirements are concerned, then, there is likewise no need of a sectional division.



FIG. 34. SOUTH FRONT—RESIDENCE OF DR. EDWARD B. KRUMBHAAR, WHITEMARSH VALLEY, PA.
Arthur H. Brockie, Architect.

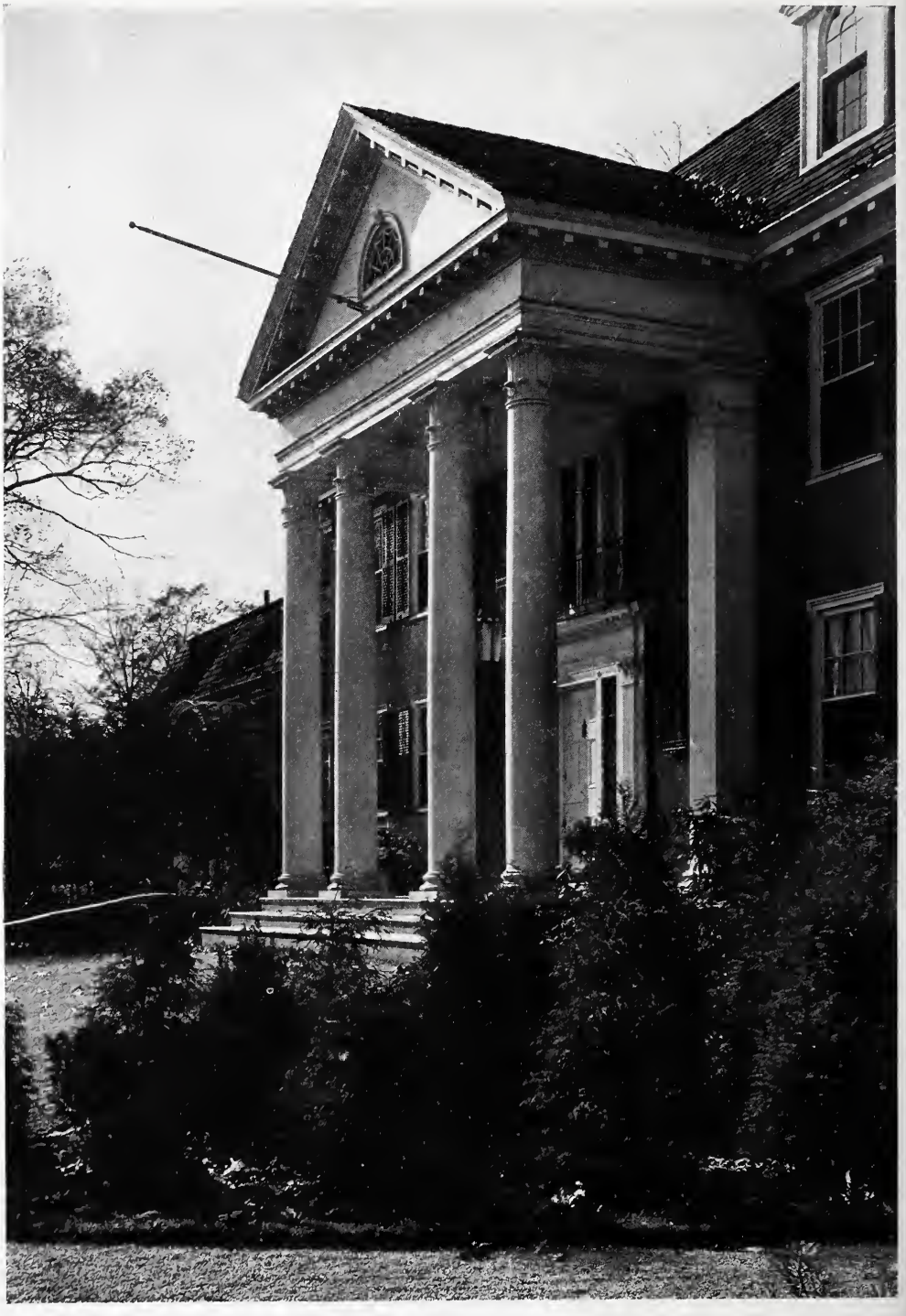


FIG. 36. MAIN ENTRANCE—RESIDENCE OF EDWARD C. DELAFIELD, ESQ., RIVERDALE-ON-HUDSON, NEW YORK. DWIGHT JAMES BAUM, ARCHITECT

2 - Artistic Conditions
- Traditions & Tendencies of Style

WHILE practical conditions determine the main types and the accommodations of our country houses, artistic conditions—the traditions and tendencies of style—have a decisive influence not only in fixing the character of the exterior and interior treatment, but even in determining the plan. That they are not unified to the degree to which national traditions were in less omniscient ages does not make them less vitally felt—does not make our modern situation fundamentally unique. In so far as they involve a conflict between inherited forms and novel or exotic elements they but continue an age-long process. What is novel in the last century is merely that the inherited forms themselves embrace a wide range of selection. The eclectic theory as developed by the nineteenth century was that choice between all these "historic styles" is perfectly free, to be exercised by client or architect according to unrestrained personal preference, even in such isolated experiments as the Pompeian house at Saratoga. Within a single design also the principle permits a combination of elements of different styles, a fresh composition with elements of one style, or the literal reproduction of an individual historic example. In its application there have always been certain favored styles that have the advantage of conformity to practical needs or cultural inheritance. Even among these at any given moment a consensus of preference tends to reestablish the old unity of style; a changing fashion continues the old evolution of style at a quicker *tempo*. For better or worse this eclectic principle is still dominant in American design, which, as Mr. Henry James has said of New York, "like an ample childless mother, consoles herself for her own sterility by an unbridled course of adoption."

In current American domestic architecture the extreme range of accepted precedent does not extend beyond Renaissance or post-Renaissance architecture in certain of its manifestations. Italian, English, Colonial and, to a less degree, French and Spanish. Whatever the case in ecclesiastical or collegiate work, domestic Gothic is now felt to be an anachronism, and even French work of the Valois, with its strong mediaeval tinge, has come to seem exotic and is scarce attempted. Perhaps it is hardly too much to suggest that even Tudor and Elizabethan treatments in any strictness no longer appeal to us as quite capable of American naturalization. The domination of the classic spirit which this indicates is revealed also in the general distaste for anything florid or baroque—the expurgation of styles in the direction of classical purism.

The Tudor style, to be sure, has had recently superlatively sympathetic exemplification in two houses by Mr. John Russell Pope—the Stuart Duncan residence (Fig. 5) at Newport and the Allen S. Lehman house at Tarrytown, but by their very perfection in the reproduction of motives, textures, and weathering they seem mirages of old England rather than growths in American soil. It is only through its modern adaptations at home by Lutyens, Voysey and others, that the older English tradition becomes really assimilable by us. These retain of the mediaeval elements no more than the casement window, the steep roof with gable and chimney stack, and the flexible mode of composition, accepting without reluctance every possibility of adaptation



FIG. 37. FORECOURT—RESIDENCE OF H. P. WHITNEY, ESQ., GLEN COVE, L. I.
Charles Willing of Furness, Evans & Co., Architect.



FIG. 39. WEST AND SOUTH FRONTS—RESIDENCE OF H. P. WHITNEY, ESQ., GLEN COVE, L. I.
Charles Willing of Furness, Evans & Co., Architect.



FIG. 38. NORTH FRONT—RESIDENCE OF H. P. WHITNEY, ESQ., GLEN COVE, L. I.
Charles Willing of Furness, Evans & Co., Architect.



FIG. 40. KITCHEN WING—RESIDENCE OF H. P. WHITNEY, ESQ., GLEN COVE, L. I.
Charles Willing of Furness, Evans & Co., Architect.



FIG. 41. RESIDENCE OF H. BELLAS HESS, ESQ., HUNTINGTON, L. I., HOWELLS & STOKES, ARCHITECTS.



FIG. 42. TERRACE—RESIDENCE OF H. BELLAS HESS, ESQ., HUNTINGTON, L. I. HOWELLS & STOKES, ARCHITECTS.

to practical requirements, and turning them to picturesque advantage on the exterior. In this vein Mr. Lewis Colt Albro and Mr. Alfred Hopkins, among other architects, have had notable success of recent years; and this issue contains interesting examples by Mr. Frank J. Forster and others.

Similarly we find, as the sole versions of the French château which are now acceptable, adaptations of such Louis XIII buildings as les Grotteaux, most successfully in Mr. Platt's house at Rockville and Mr. Pope's house for Commodore Gould. In them the steep roofs and tall chimneys do not preclude the level cornice lines, wooden sash bars, and pure if simple detail which connote modernity.

The central body of forms in American style of the present is beyond dispute the academic vocabulary of the Italian Renaissance, of Palladianism and classicism in France, England and the early American republic, and their more vernacular expression in Georgian England and the American colonies.

How this came to be, within twenty-five years from the date we still incline to regard as the close of the dark ages of American architecture, is a story the incidents of which in the realm of monumental building are familiar enough. To understand its bearings in domestic architecture, however, we must give attention to a phase much less known. The obscure origins of the neo-classic renaissance in America are to be sought long before the dazzling object lesson of the World's Fair of 1893 in domestic architecture.

It was the stirrings of the much travestied "Queen Anne" movement in England—the initial program of its founders, Neshfield and Shaw, was the revival of the native vernacular materials and detail of the period of Anne—which led Charles F. McKim, with Meade, White and Bigelow, to make in 1876 what they came afterwards to call their "celebrated trip" along the New England coast to sketch and measure the American work of Anne and the Georges so that it might furnish a similar inspiration. Thus to the young Beaux-Arts elèves, with their portfolios full of high-roofed châteaux, and to the right hand man of Richardson came the impulse responsible for their first executed works of classic character, the revived Colonial houses of Newport and Lenox. It was the decisive impulse of the great movement which, gathering strength by reverting to the Italian sources in the Villard houses, the New York clubs, the Boston Library, and then finally to the classic fountain-heads themselves, has swept all before it.

Appreciation of the basic importance of the Colonial revival in this movement gives added significance to the work of the long line of its exponents, from the late Robert S. Peabody and Arthur Little onwards. Beginning with the copying and compounding of isolated details, with a consequent overloading of motives very far from the simplicity of the original work, they have made constant advances in sympathetic knowledge and employment of the styles. The initial enthusiasm for the properly "Georgian" buildings of about 1750, from the James River, Annapolis, Charleston, Philadelphia, Newport and Massachusetts Bay, has widened into catholic appreciation of all the work from the time of settlement down to 1830. Study and publication, the necessary prerequisites to revival, have recently made familiar the seventeenth century houses; and, in spite of the difficulty of adapting these mediaeval survivals to modern requirements of living, there have been already a few experiments in imitation. Much more fruitful so far has been the revival of post-Colonial work, whether the delicate Adam detail of Bulfinch and McIntire, or the more classic Jeffersonian porticoes of the South. Whereas at first elements from widely different periods were combined, greater discrimination has brought a greater consistency which makes the work of each generation seem illiterate to the one that follows. While most designers have nevertheless continued the effort to use the Colonial forms as the vocabulary of a living language, there have been an increasing number of direct reproductions, such as Mr. Platt's of Westover. A model of special attraction has been Mount Vernon, which has



FIG. 43. RESIDENCE OF E. E. BAKER, ESQ., KEWANEE, ILL.* FREDERICK W. PERKINS, ARCHITECT.

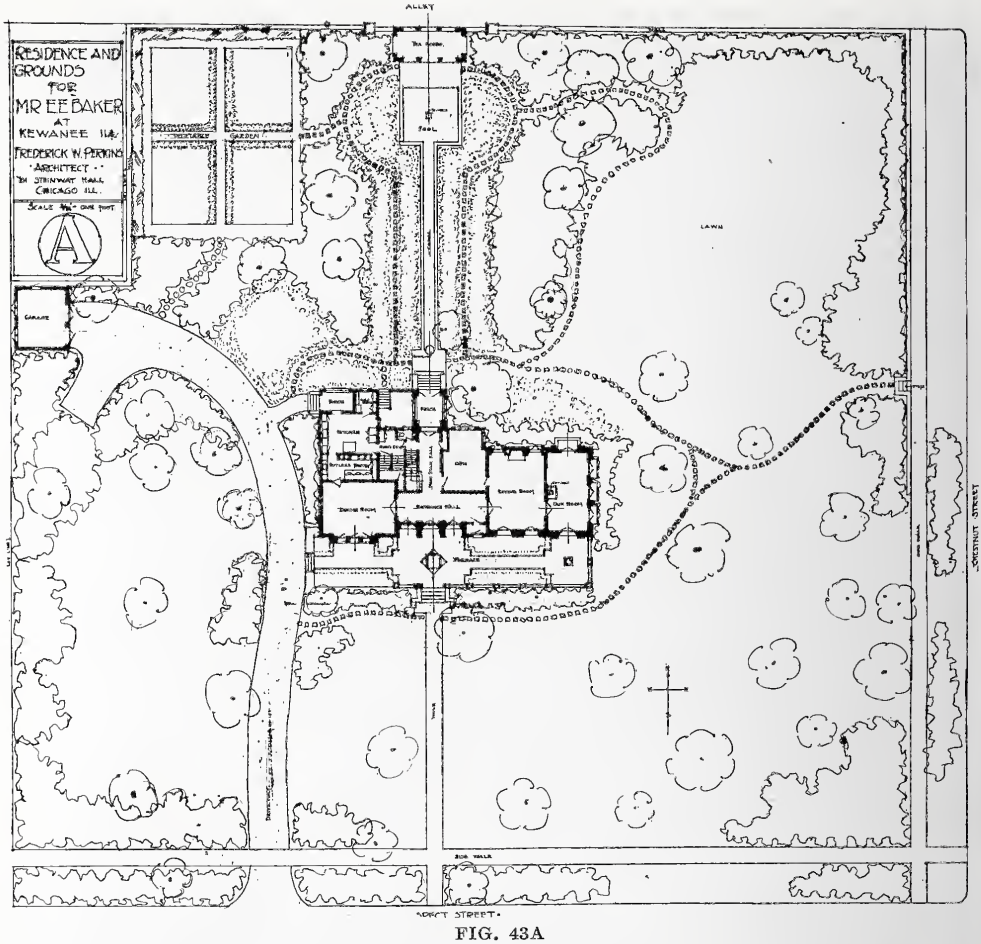


FIG. 43A

been followed with greater or less strictness in a multitude of examples, notably, though here with the freedom of a new creation, in the Tracy Dows house at Rhinebeck (Fig. 6).

The lack of luxuriousness and amplitude in the Colonial style, as exemplified in the simplicity and extreme smallness of scale even of such houses as Mount Vernon and Whitehall, has led designers to seek inspiration or reinforcement from the English, prototypes of the early American work. Here also Georgian influence has recently been succeeded by a vogue of Adam detail and character, initiated in the Ritz-Carlton hotels and in several houses of Mr. Pope, such as that of Mr. James Swan Frick at Guilford (Fig. 8). The related French work of Louis XVI has so far found more application in city houses than in the country. Indeed it must be realized that in country house architecture, even where it remains academic, French influence is waning; and the Grand Trianon, which inspired the Oelrichs house at Newport, would scarcely be selected for reproduction today.

Italian precedent, on the contrary, has been steadily invoked, both to supplement the Colonial and to replace it. It was in the gardens by Mr. Platt that Italian influence first made itself strongly felt in the American country place. His houses in connection with them were at first almost purely Colonial or Georgian, and it has only been later, for instance, in his McCormick house, that he has car-



FIG. 44. RESIDENCE OF E. E. BAKER, ESQ., KEWANEE, ILL. FREDERICK W. PERKINS, ARCHITECT



FIG. 45. RESIDENCE OF LOUIS REGENSTEIN, ESQ., ATLANTA, GA. HENTZ, REID & ADLER, ARCHITECTS.



FIG. 46. RESIDENCE OF S. W. MOORE ESQ., KANSAS CITY, MO.
Van Brunt & Hertz, Architects.

ried the style consistently through grounds, house and interiors, even to the extreme of an open interior court. The phase of style adopted—not the Roman of Peruzzi, as with McKim, but the early Florentine of Michelozzo in San Marco and the Villa Carregi—has advanced rapidly in public favor and is beyond doubt *the* mode of the moment. The needed material has been furnished by new publications on the smaller Italian villas and farm houses and, in addition, on Italian furniture, which have been avidly taken up by furniture makers and decorators. Such notable works as the remodelings at "Shallow Brook Farm" (Fig. 10) by Mr. Benjamin Wistar Morris have established a vogue attested by several of the houses here illustrated.

In view of this vogue of the Italian house and of the Italian garden it is specially significant of the strength of the classic spirit that the architecture associated par excellence with the gardens of Italy and with their creation, the Baroque, except in Spanish treatment, has had but a single notable exemplification, the Deering villa at Miami, Florida (Fig. 9). In spite of the virtuosity and fantasy of its architects, Messrs. Paul Chalfin and F. Burrall Hoffman, it seems so far to have remained without imitators.

With these retrospective tendencies of broad or nationalistic scope is related another which manifests itself in the conscious revival or perpetuation of local traditions of style, materials, and workmanship. The idea, originating in the last generation of English architects and brilliantly exemplified in Lutyens' earlier work, is one of the dominant forces in the whole architectural world today, widely influential in Germany before the war through the efforts of Otto March and Hermann Muthesius, and now taken up officially for the rebuilding of the devastated sections of France. In America, while a similar idea lay at the root of the whole Colonial revival, in general the emphasis has lain on the universal rather than the local characteristics of the style, and any strong emphasis on Colonial traditions peculiarly local came first with the

group of Philadelphia architects under English influence, such as Walter Cope and John Stewardson. Thus has arisen the revival of the ledge-stone houses of Pennsylvania, developed especially in late years by Messrs. Mellor and Meigs and Duhring, Okie and Ziegler, and well illustrated by several works in this number. Other local variants of the Colonial, especially the Dutch work of East Jersey and Long Island, have likewise had an interesting renaissance.

The return to Spanish traditions in Florida, begun as early as 1879 by Messrs. Carrère and Hastings, has found expression in domestic architecture in their Flagler house and many others; and in California a similar inspiration has stimulated some of our finest classic work, in houses by Mr. Robert Farquhar, Mr.



FIG. 47. GARDEN FRONT—RESIDENCE OF S. W. MOORE, ESQ., KANSAS CITY, MO.
Van Brunt & Hertz, Architects.



FIG. 48. EAST FRONT—RESIDENCE OF C. E. McINNES, ESQ., RYDAL, PA.
Duhring, Okie & Ziegler, Architects.

Myron Hunt, Mr. Elmer Gray, Mr. Goodhue and others. In both these regions the style of Spain itself has been drawn upon freely, and the influence of the local heritage of old buildings appears chiefly in the simplicity and restraint which lack of means forced on Spanish builders in these outposts of empire. In New Mexico, on the other hand, where such limitation was even more pronounced and the resulting style took on more the character of the native Pueblo than of Spain, its recent revival at the hands of Mr. William Templeton Johnson and a few colleagues has strictly retained this character, with such interesting products as Mr. Sylvanus G. Morley's house at Sante Fé.

It remains to speak of those eclectic designers who, while drawing largely on traditional sources for their elements, have aimed at a free and personal mode of expression—for example, Mr. Wilson Eyre or Mr. Howard Shaw. In their earlier houses, such as Mr. Shaw's Bartlett house at Lake Geneva, the spirit of freedom or invention was dominant, but it is noteworthy that in their recent works respect for precedent tends to have the upper hand. To an even greater degree Mr. Charles Barton Keen has abandoned the individual blend of native and original elements with which his first triumphs were achieved, in favor of the relatively impersonal Georgian seen in the Leas house (Fig. 61).

The striving for a style which shall be specifically modern and American has had to face heavy odds since the overwhelming popular victory of the classical at Chicago in 1893. But in spite of this defeat in the heart of their own territory, coupled with the death of their leader, Root, the "progressives," rallied by Mr. Sullivan and Mr. Wright, have established a certain sovereignty in the vicinity of Chicago, and have even secured recognition by foreign powers while still



FIG. 49. SERVICE END—RESIDENCE OF C. E. McINNES, ESQ., RYDAL, PA.
Duhring, Okie & Ziegler, Architects.



FIG. 50 BREAKFAST PORCH—RESIDENCE OF C. E. McINNES, ESQ., RYDAL, PA.
Duhring, Okie & Ziegler, Architects.



FIG. 51. WEST FRONT—RESIDENCE OF C. E. McINNES, ESQ., RYDAL, PA.
Duhring, Okie & Ziegler, Architects.



FIG. 52. WEST DOOR—RESIDENCE OF C. E. McINNES, ESQ., RYDAL, PA.
Duhring, Okie & Ziegler, Architects.



FIG. 53. NORTH FRONT—RESIDENCE OF E. H. FITCH, ESQ., MEADOWBROOK, PA.
Tilden & Register, Architects.

regarded by our own ruling artistic authorities as rebels beyond the pale of the law. The attraction of the "merely novel" or the "bizarre" is not enough to explain this vitality, which rests partly on the fundamental appeal of the progressive argument, partly on the fact that, while the academic school has tended to subordinate functional to formal considerations, the progressives have steadily emphasized the suggestions of function. Thus the wide, ramified plans of Mr. Wright—unconventional in a strict sense though they are—do not rest merely on caprice but on acceptance of the current preference for rooms all on a single floor and on a logical grouping of living rooms, bedrooms, guest rooms, service, and so on, in individual suites with light and air on three sides. Nowhere is this better seen than in Mr. Wright's own place at Spring Green (Fig. 14), where studios and draughting rooms, living quarters for assistants, and farm buildings are included in the ensemble, the consistency and personal character of which make it beyond most in America an authentic work of creative art. Though acceptance of the progressive principle does not necessarily imply imitation of this or any single formula, and few designers have pushed its application to such logical extremes, there is a body of work of related impulse impressive in its mass and cohesion.



FIG. 54. DOOR TO MASTER'S ROOM—RESIDENCE OF E. H. FITCH, ESQ., MEADOWBROOK, PA.
Tilden & Register, Architects.



FIG. 55. HOUSE DOOR—RESIDENCE OF E. H. FITCH, ESQ., MEADOWBROOK, PA.
Tilden & Register, Architects.



FIG. 56. SOUTH AND EAST FRONTS—RESIDENCE OF E. H. FITCH, ESQ., MEADOWBROOK, PA.
Tilden & Register, Architects.



FIG. 57. FORECOURT—RESIDENCE OF MRS. ALBERT B. KELLEY, RADNOR, PA.
Wilson Eyre & McIlvaine, Architects.



FIG. 58. TERRACE AND SOUTH FRONT—RESIDENCE OF MRS. ALBERT B. KELLEY, RADNOR, PA.
Wilson Eyre & McIlvaine, Architects.



FIG. 59. SOUTH FRONT—RESIDENCE OF MRS. ALBERT B. KELLEY, RADNOR, PA.
Wilson Eyre & McIlvaine, Architects.



FIG. 60. BREAKFAST TERRACE AND EAST FRONT—RESIDENCE OF MRS. ALBERT B. KELLEY, RADNOR, PA.
Wilson Eyre & McIlvaine, Architects.



FIG. 63. RESIDENCE OF BENJAMIN ODELL, ESQ., KENILWORTH, ILL.
George W. Maher, Architect.



FIG 61. RESIDENCE OF LEROY P. LEAS, ESQ., OVERBROOK, PHILADELPHIA, PA.
Charles Barton Keen, Architect.



FIG. 62. RESIDENCE OF LEROY P. LEAS, ESQ., OVERBROOK, PHILADELPHIA, PA.
Charles Barton Keen, Architect.

3- The Solutions
Disposition & Treatment of House & Surroundings

IN the solutions of the country house problem of today in America economic and social conditions determine the general type of house and its accommodations, while natural conditions determine many details of its construction and equipment; but in the disposition and treatment, artistic motives dominate to an unusual degree. In England, at least until the most recent years in which technical development and a recrudescence of academicism in style are bringing a similarity to American conditions, this has not been the case; natural conditions and minute considerations of convenience have largely governed the choice of site, the orientation and the grouping of rooms, the outline of the plan being less preconceived than resultant. If, for instance, in placing the living rooms choice were necessary between the usual southern exposure and a fine prospect to the north, the outlook would inevitably be sacrificed to the need of courting the sun. The mediaeval, picturesque mode of composition has permitted, even invited, the most accidental resultant combinations of exterior forms, and even the fondness for using a wing of the service quarters to frame an Elizabethan forecourt has been due not only to romantic revivalism but to desire to give the butler easy oversight of the arrival and departure of guests. With us, on the contrary, mechanical development permits climatic difficulties in the choice of site or orientation to be disregarded in the interest of prospect, and our academic tendency of twenty-five years standing generally dictates the adoption of a plan of formal regularity.

In the general disposition of the American house the idea of separation of functions of approach, living and service rules in a general way, without being carried out with the same minuteness as in England. Thus there is a broad separation between the entrance front and the opposite garden front, along which lie the principal living rooms, but it is not regarded as a positive objection that some of these run through and command the entrance. The service quarters are isolated in a wing with their own drive and entrance, but the limitations of our formal planning make it not unusual even in the largest establishments that the servants must traverse the dining room to reach the body of the house and that the hand luggage of guests must be taken in at the main door and carried up the main stairs.

In the arrangement of the plan the diversity of artistic tradition leaves room for the greatest variety of schemes, and no single one has the almost universal acceptance of the Elizabethan U, E, or H plan of the larger house in England. Nevertheless among the prevailingly formal plans one scheme is clearly predominant. It is that of a rectangular main mass with entrance and garden fronts on the longer sides and with wings for porches and service at opposite ends, as seen in the Hess (Fig. 64) Leas (Fig. 69) and many other houses in this number. In the smaller houses with the servants' quarters limited to kitchen, pantry and a room or two above, these wings may be perfectly symmetrical, at least in apparent mass, as in the Gaylord residence. With greater development of the

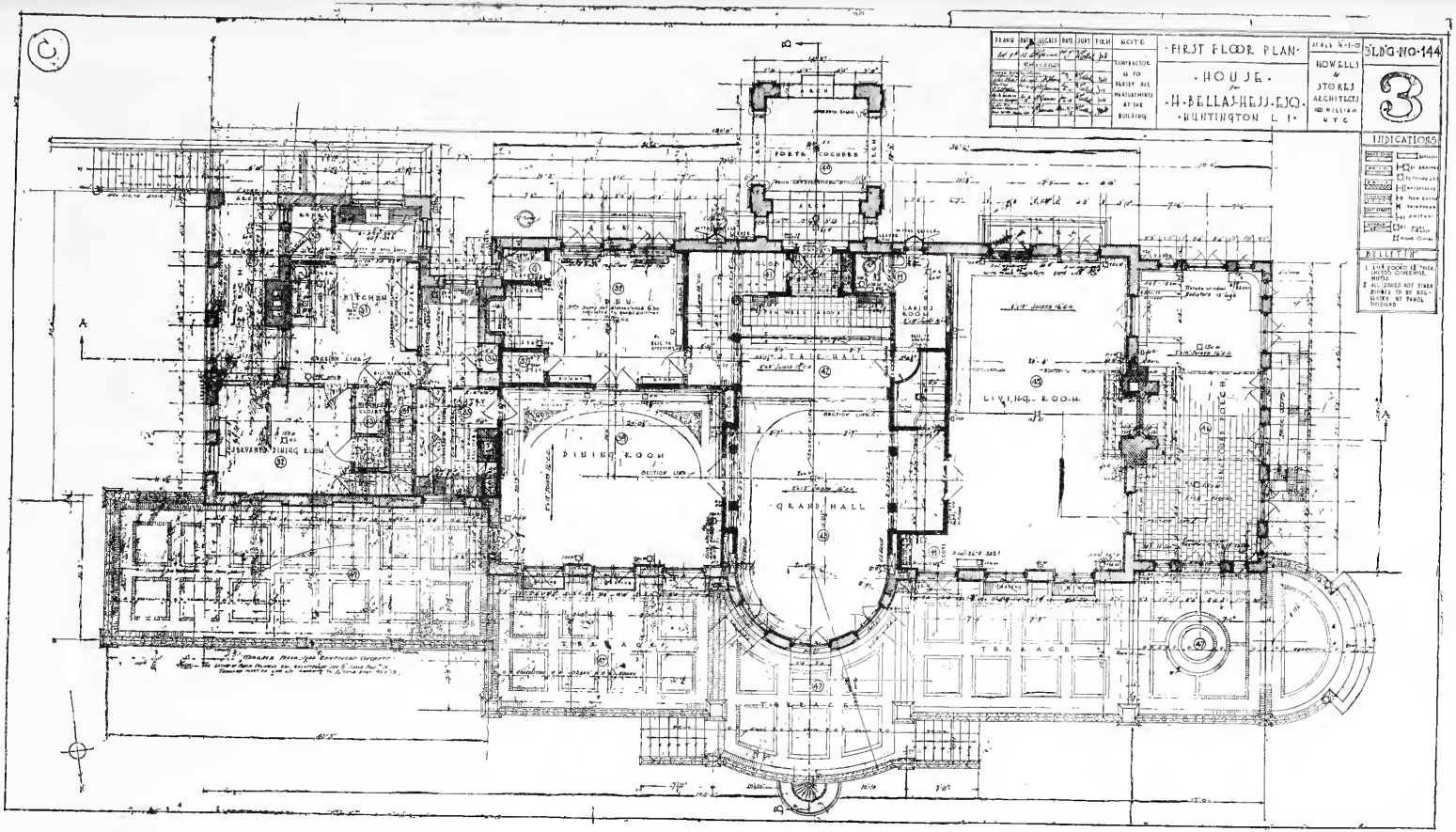
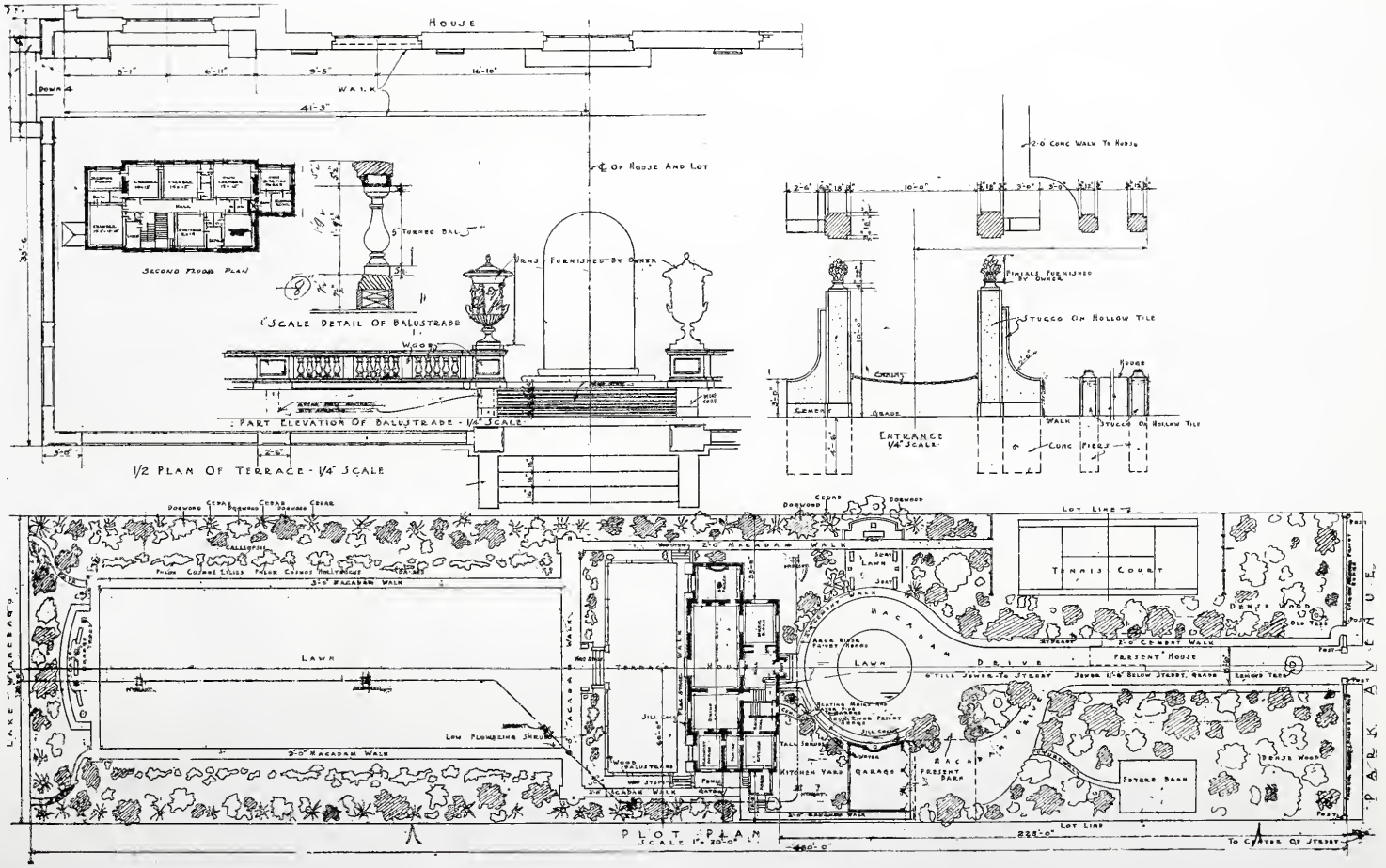


FIG. 64. FIRST FLOOR PLAN—RESIDENCE OF H. BELLAS HESS, ESQ., HUNTINGTON. L. I. HOWELLS & STOKES, ARCHITECTS.



FIGS. 65 AND 66. FIRST AND SECOND FLOOR PLANS—RESIDENCE OF G. S. GAYLORD, ESQ., NEENAH, WIS. CHILDS & SMITH, ARCHITECTS.

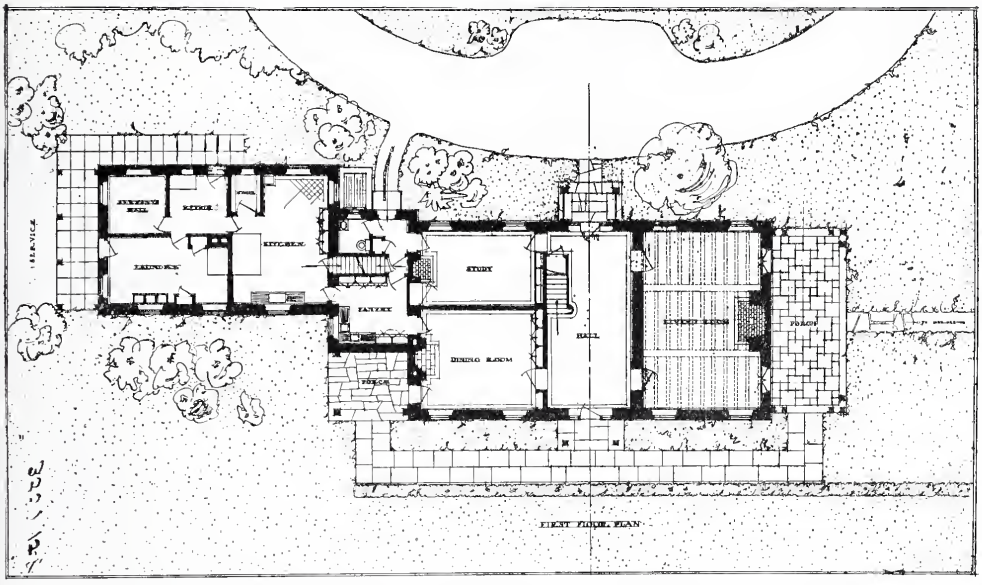


FIG. 67. FIRST FLOOR PLAN—RESIDENCE OF E. H. FITCH, ESQ., MEADOWBROOK, PA.
Tilden & Register, Architects.

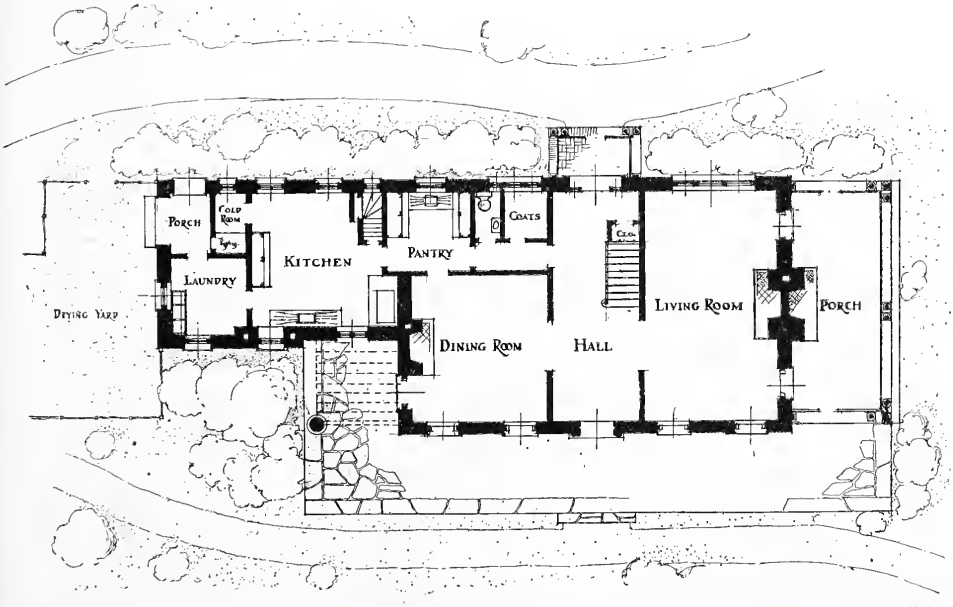


FIG. 68. FIRST FLOOR PLAN—RESIDENCE OF C. E. McINNES, ESQ., RYDAL, PA.
Duhring, Okie & Ziegler, Architects.

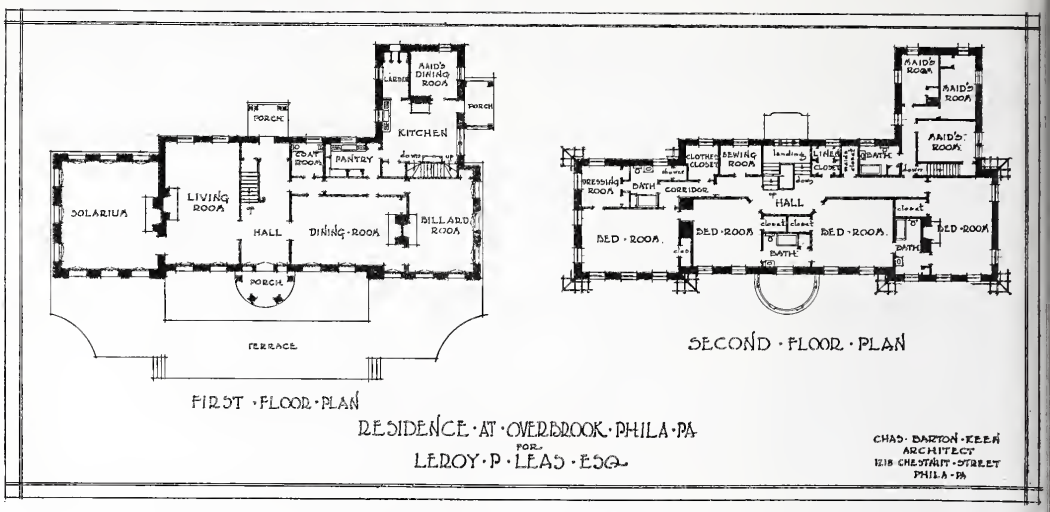


FIG. 69. FIRST AND SECOND FLOOR PLANS—RESIDENCE OF LEROY P. LEAS, ESQ., OVERBROOK, PHILADELPHIA, PA.
Charles Barton Keen, Architect.

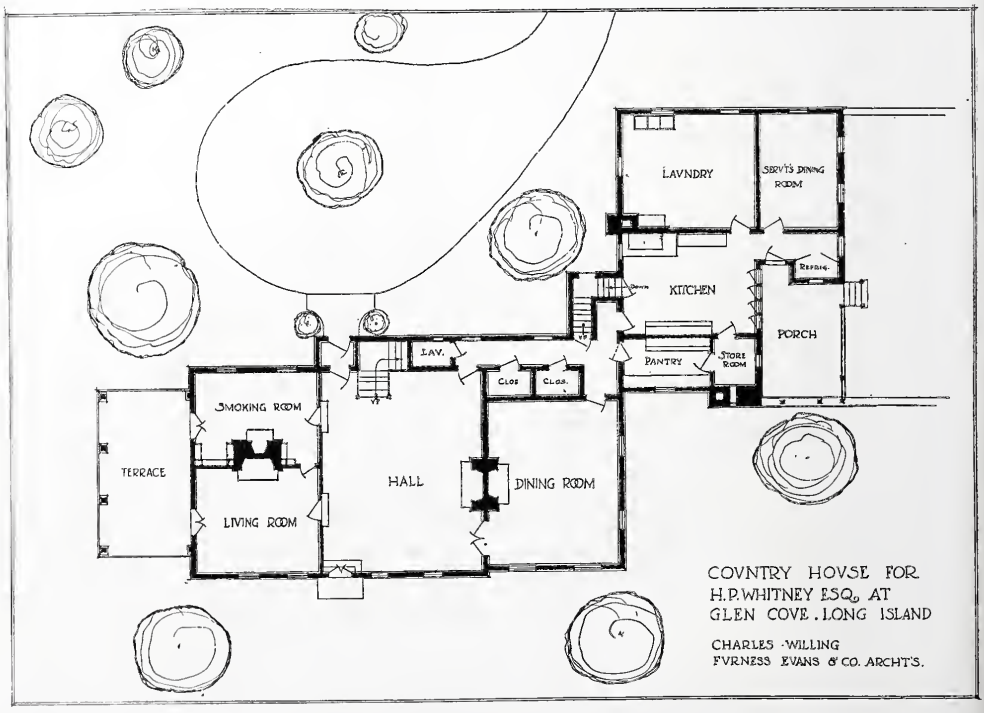


FIG. 70. FIRST FLOOR PLAN—RESIDENCE OF H. P. WHITNEY, ESQ., GLEN COVE, L. I.
Charles Willing, of Furness, Evans & Co., Architect.

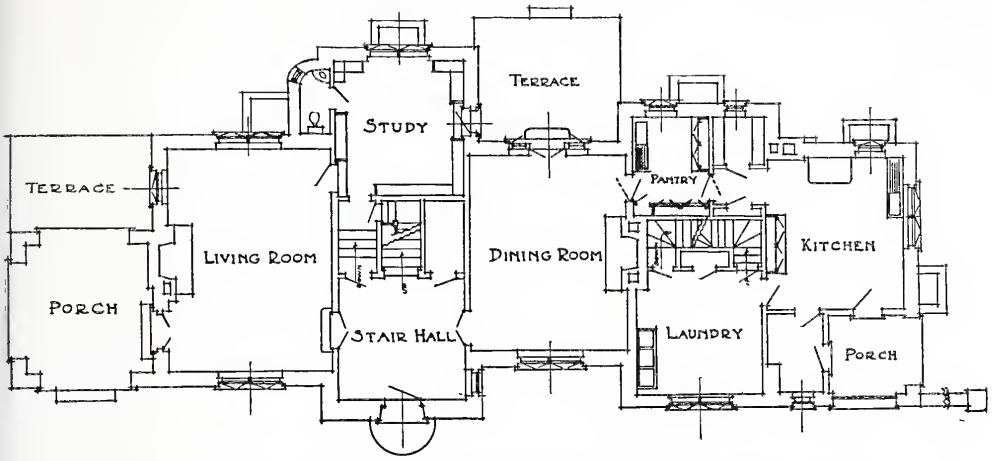


FIG. 71. FIRST FLOOR PLAN—RESIDENCE OF DR. EDWARD B. KRUMBHAAR, WHITEMARSH VALLEY, PA.
Arthur H. Brockie, Architect.

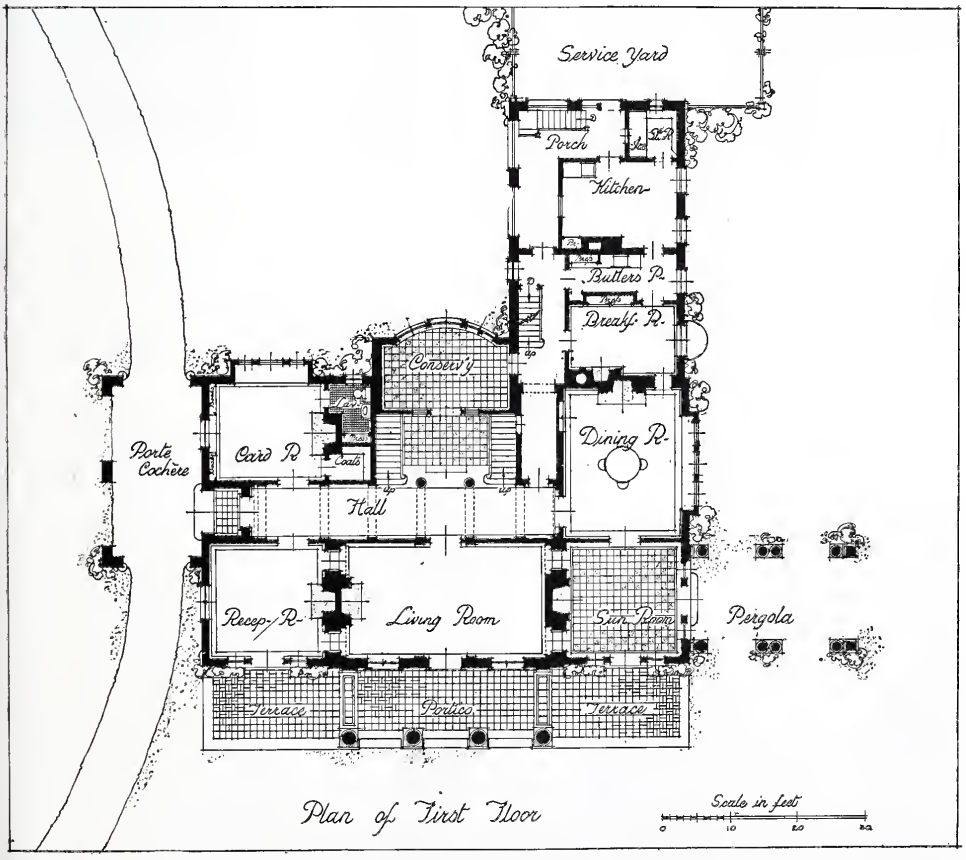


FIG. 73. FIRST FLOOR PLAN—RESIDENCE OF JOHN A. HITCHCOCK, ESQ., NASHVILLE, TENN.
Dougherty & Gardner, Architects.

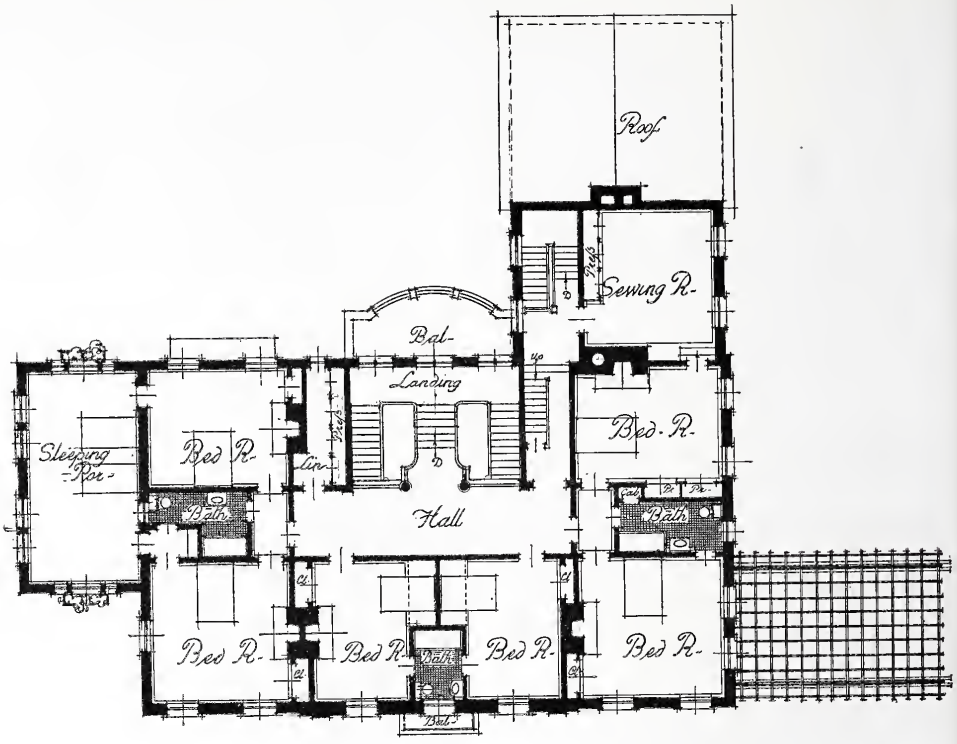


FIG. 74. SECOND FLOOR PLAN—RESIDENCE OF JOHN A. HITCHCOCK, ESQ., NASHVILLE, TENN.
Dougherty & Gardner, Architects.

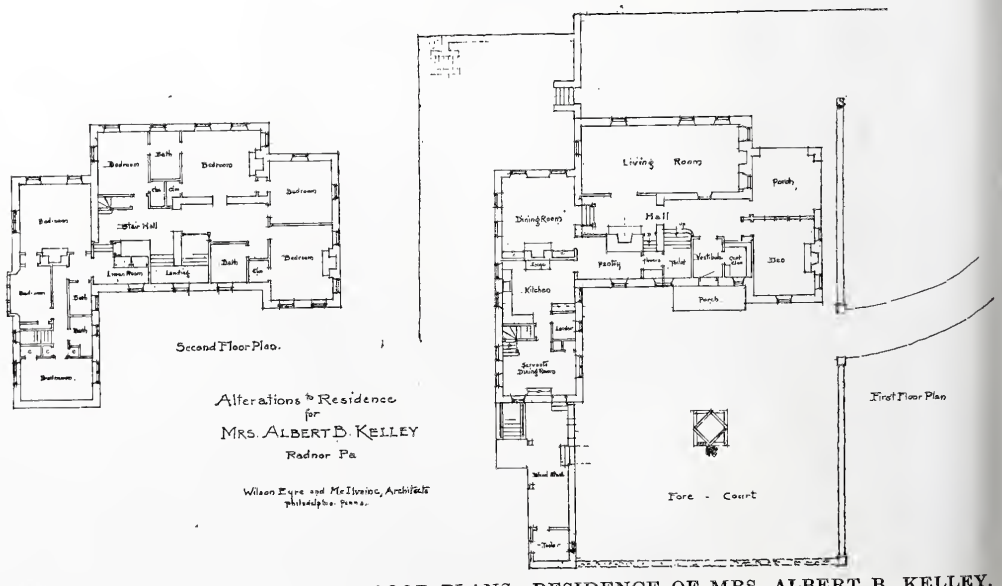


FIG. 72. FIRST AND SECOND FLOOR PLANS—RESIDENCE OF MRS. ALBERT B. KELLEY, RADNOR, PA.
Wilson Eyre & McIlvaine, Architects.

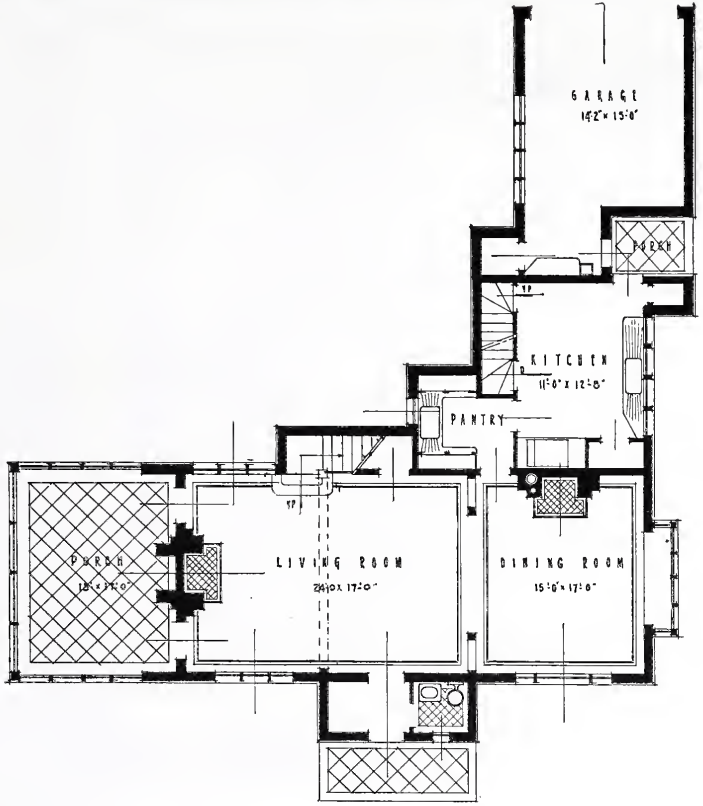


FIG. 75. FIRST FLOOR PLAN—RESIDENCE OF WALTER B. WALKER, ESQ., ARDSLEY, N. Y.
Frank J. Forster, Architect.

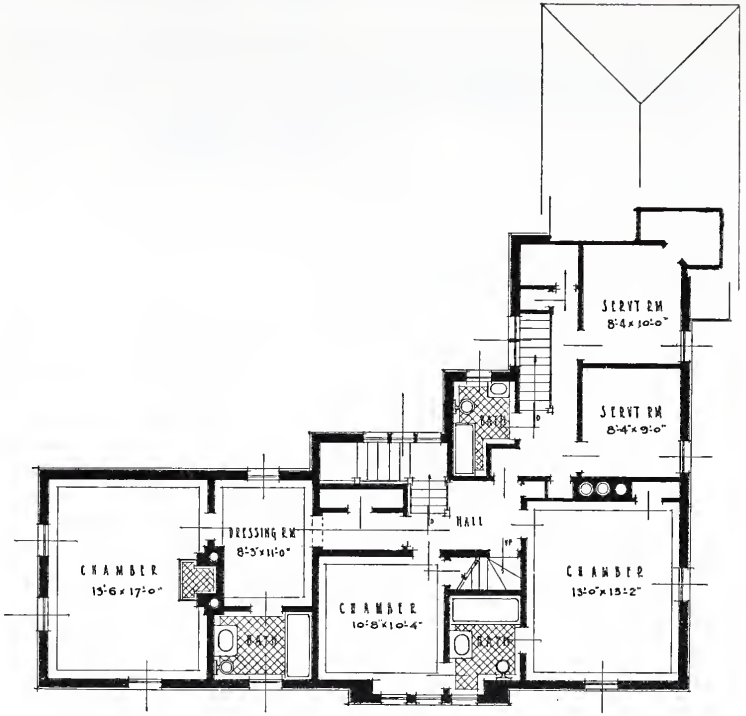


FIG. 76. SECOND FLOOR PLAN—RESIDENCE OF WALTER B. WALKER, ESQ., ARDSLEY, N. Y.
Frank J. Forster, Architect.

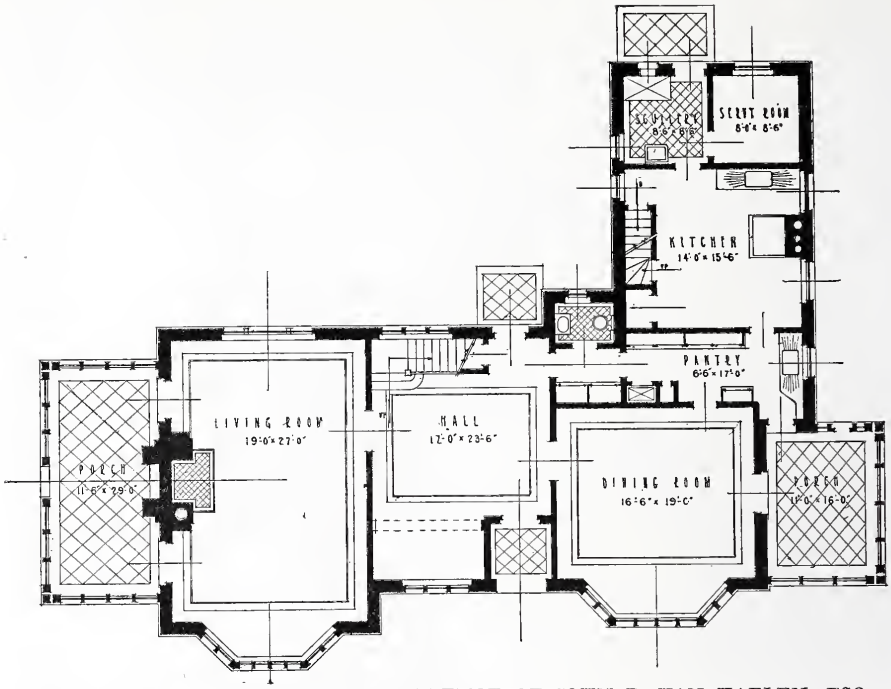


FIG. 77. FIRST FLOOR PLAN—RESIDENCE OF JOHN B. VAN HAELEN, ESQ., HARTSDALE, N. Y.
Frank J. Forster, Architect.

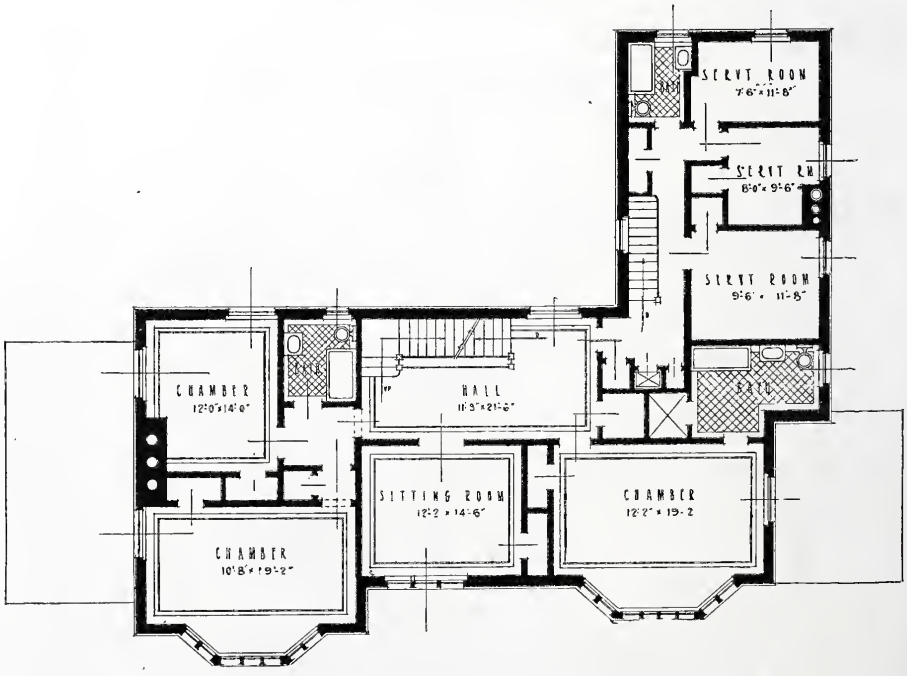


FIG. 78. SECOND FLOOR PLAN—RESIDENCE OF JOHN B. VAN HAELEN, ESQ., HARTSDALE, N. Y.
Frank J. Forster, Architect.

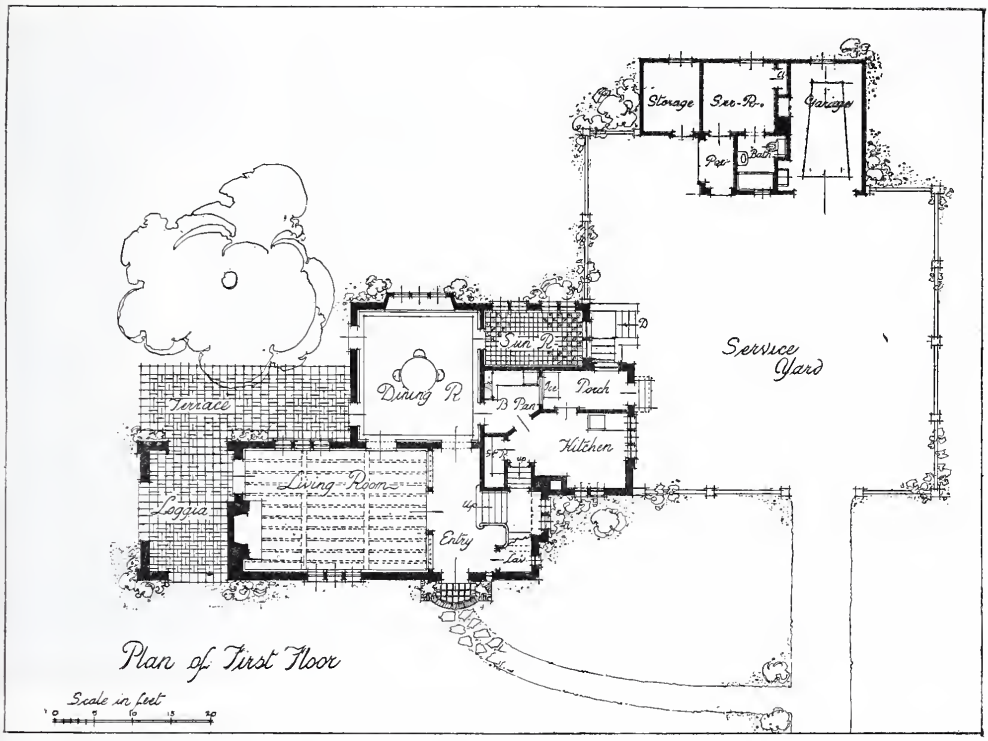


FIG. 79. FIRST FLOOR PLAN—RESIDENCE OF T. I. WEBB, ESQ., NASHVILLE, TENN.
Dougherty & Gardner, Architects.

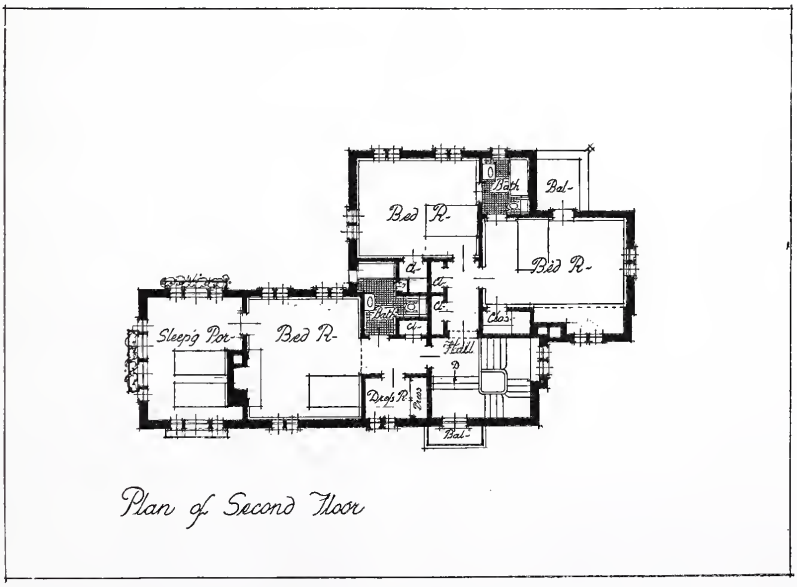


FIG. 80. SECOND FLOOR PLAN—RESIDENCE OF T. I. WEBB, ESQ., NASHVILLE, TENN.
Dougherty & Gardner, Architects.



FIG. 81. RESIDENCE OF T. I. WEBB, ESQ., NASHVILLE, TENN.
Dougherty & Gardner, Architects.

service end the dissymmetry may be ignored if the main mass is sufficiently strong; or may be masked by trees, as in the Hess (Fig. 64) house, or by treating the service as a primary wing of the same weight as the porch wing, with a secondary, subordinate wing, perhaps of considerable length, beyond. The latter scheme appears, almost identically, in the Fitch (Fig. 67) and McInnes (Fig. 68) houses, in each of which a small dining porch fronts the beginning of the service wing, and, by balance with the living porch, heightens the symmetry of the garden façade. The setting back of the wing itself tends to open the view from the living rooms even on this fourth side of the house. The secondary service wing generally continues in the lengthwise direction, so as not to obtrude either on the entrance or on the garden front, but it is occasionally carried at right angles toward the entrance side, as in the Leas (Fig. 69) and Whitney (Fig. 70) houses. Only rarely, however, is this wing long enough to form one side of a forecourt there, the two examples of this English feature which are shown here being both from the firm of Mr. Wilson Eyre. In exceptional cases with the entrance at the end of the house, as in the Hitchcock house at Nashville, (Fig. 73) both long sides may be free and the service wing may still be retired from the approach.

In more informal planning—associated usually with styles outside the academic canon—when this basic scheme and especially the idea of two symmetrical fronts is abandoned, it is common to find the service wing brought into closer connection with the entrance hall, making a plan pronouncedly L-shaped. The Zenke house at Riverdale, illustrated in the Architectural Record for October, 1917, is a small house of this sort in which the living rooms are kept toward the garden and the service wing projects beside the entrance. In general, however, this scheme is felt to cramp the entrance too much, and the wing is reversed, bringing the dining room on the entrance front

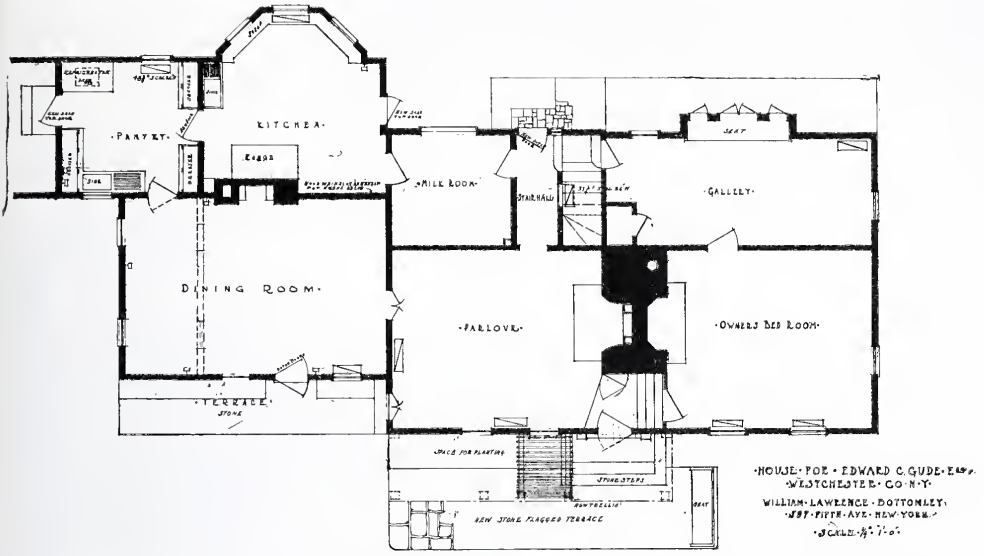


FIG. 82. FIRST FLOOR PLAN—RESIDENCE OF EDWARD C. GUDE, ESQ., WHITE PLAINS, N. Y.
William Lawrence Bottomley, Architect.

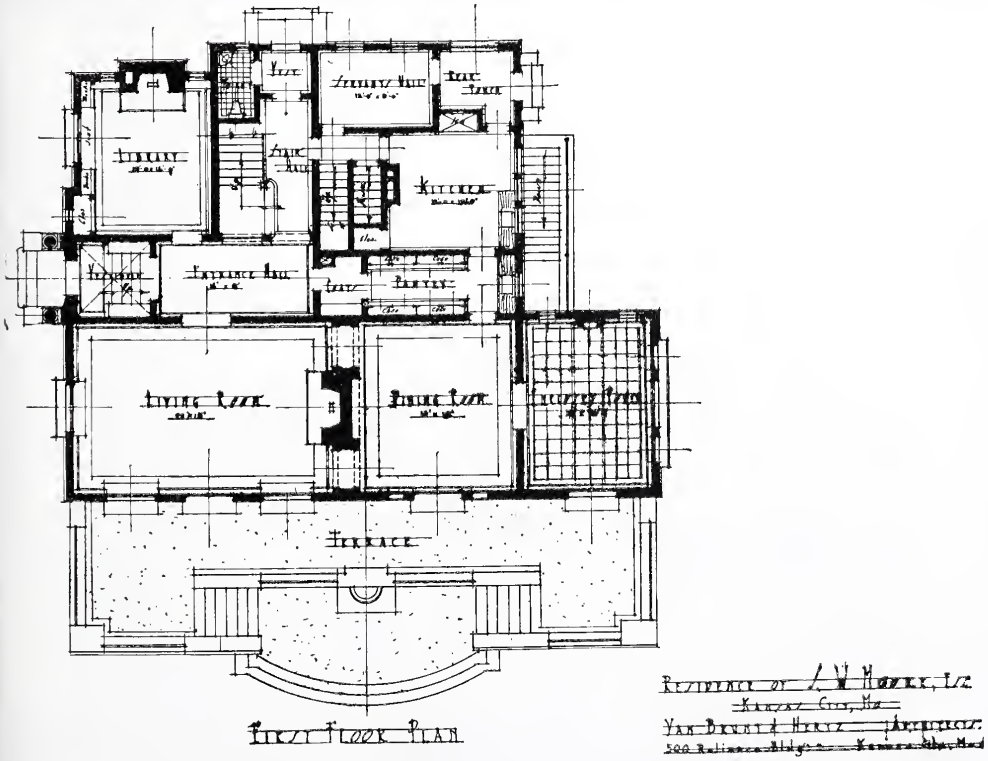


FIG. 83. FIRST FLOOR PLAN—RESIDENCE OF S. W. MOORE, ESQ., KANSAS CITY, MO.
Van Brunt & Hertz, Architects.



FIG. 85. RESIDENCE OF DR. W. D. HAGGARD, NASHVILLE, TENN.
Dougherty & Gardner, Architects.

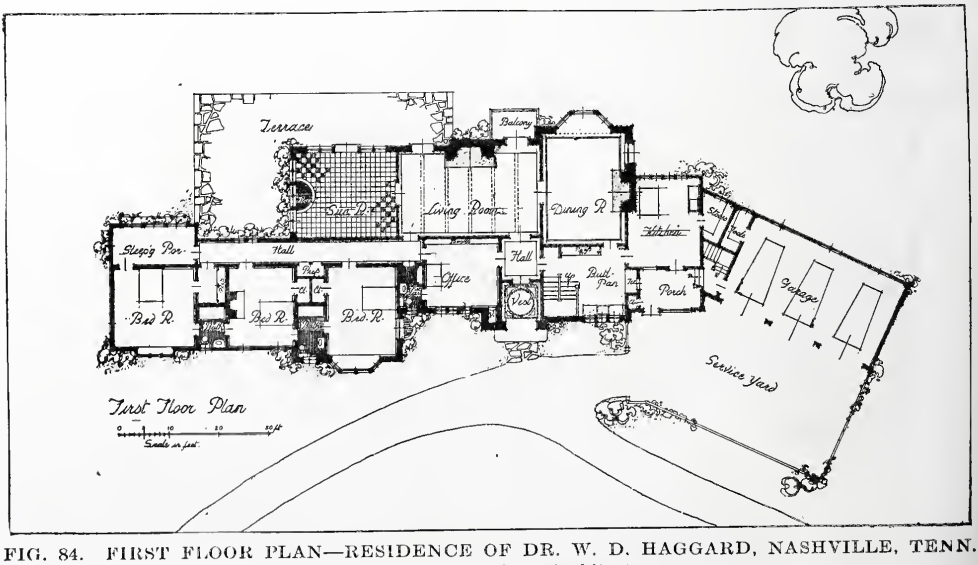


FIG. 84. FIRST FLOOR PLAN—RESIDENCE OF DR. W. D. HAGGARD, NASHVILLE, TENN.
Dougherty & Gardner, Architects.



FIG. 86. GARDEN FRONT—RESIDENCE OF DR. W. D. HAGGARD, NASHVILLE, TENN.
Dougherty & Gardner, Architects.

and making the house conform more to a conventionally suburban scheme in which the "street front" is principal. This is illustrated by the Walker house (Fig. 75), which nevertheless retains a clear view from the living room over the garden to the rear. In the Van Haelen house at Hartsdale (Fig. 77) the scheme is fundamentally the same, although turned at right angles to the street. The T. I. Webb house at Nashville (Fig. 79), on the other hand, has an ingenious irregular scheme which surmounts all practical difficulties, placing all living rooms toward the garden without allowing the service wing to crowd the entrance. A scheme with one of the sides adjacent to the entrance front developed as the garden front with a resulting plan rather more "chunky" than would be otherwise desirable, appears in the Moore house near Kansas City (Fig. 83).

Among informal plans there is an interesting group in which the right angle is abandoned where this is desirable in the interests of adaptation to outlook or topography. The most common of such irregularities is the placing of the service wing diagonally so that it shall be less obtrusive on the garden side and still shall not encroach too much on the entrance front. Something of this sort is seen in the plan of the Haggard house in Nashville (Fig. 84). Coupled with picturesqueness of style, however, the irregularity often goes further, as in the Sherman Hall residence (Fig. 86).

In the disposition of all but the main living rooms other considerations beside those of plan make themselves felt. Ordinarily there is one full story above the ground floor, but occasionally bed rooms as well as living rooms are kept on a single floor. In the North this involves much added expense for foundations, and it is not an accident that the scheme is more in favor in California and the South. Wide ramification of the service quarters on the ground floor level—made necessary in England by the omission of cellars—is likewise only practical in southern latitudes, and since in the old

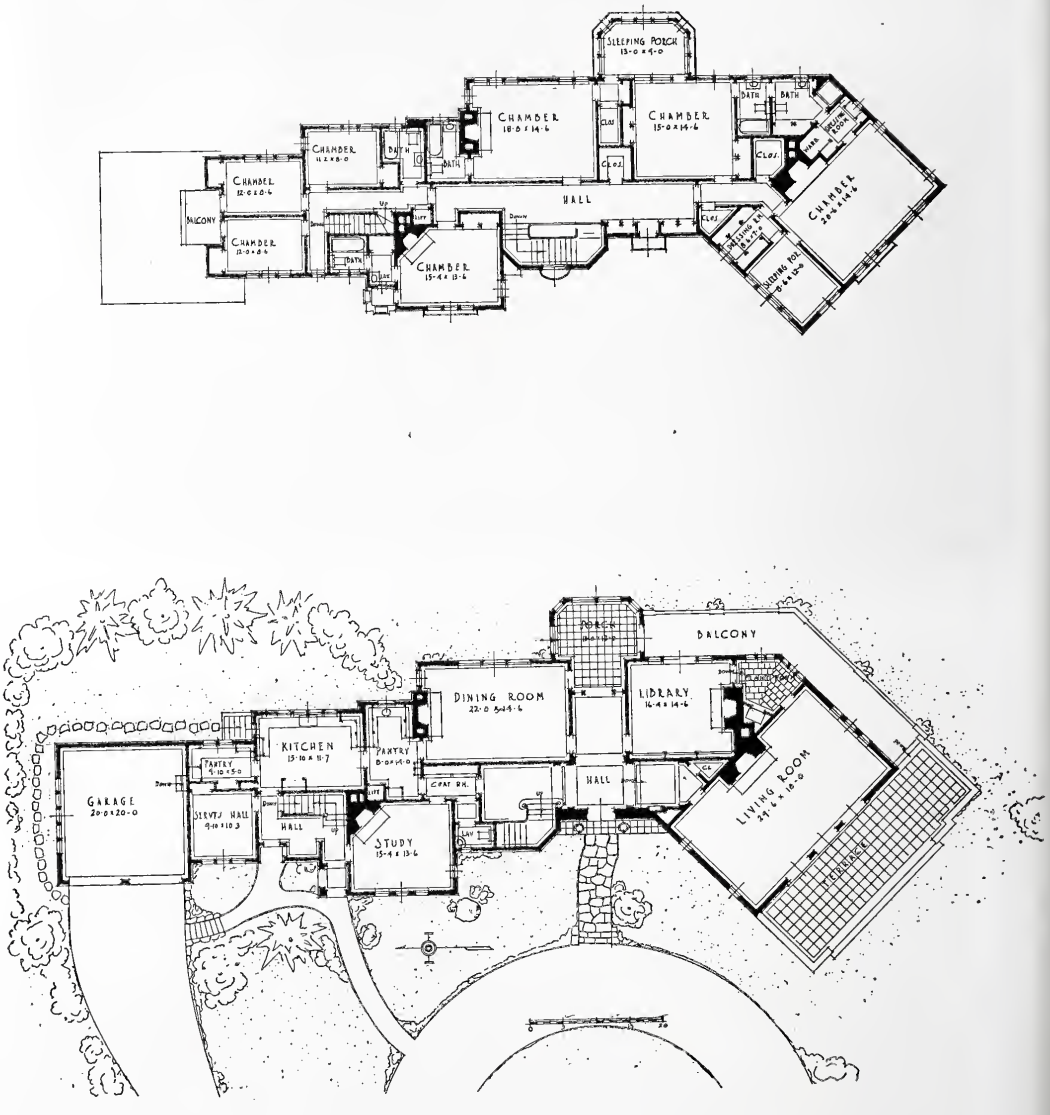


FIG. 87. FIRST AND SECOND FLOOR PLANS—RESIDENCE OF SHERMAN R. HALL, ESQ., PORTLAND, OREGON. LAWRENCE & HOLFORD, ARCHITECTS.



FIG. 88. RESIDENCE OF SHERMAN R. HALL, ESQ., PORTLAND, OREGON. LAWRENCE & HOLFORD, ARCHITECTS.



FIG. 89. RESIDENCE OF CHARLES G. WITHERSPOON, ESQ., LARCHMONT, N.Y. WALKER & GILLETTE, ARCHITECTS.



FIG. 90. RESIDENCE OF CHARLES G. WITHERSPOON, ESQ., LARCHMONT, N.Y. WALKER & GILLETTE, ARCHITECTS.



FIG. 91. RESIDENCE OF SAMUEL D. STEVENS, ESQ., MARBLEHEAD, MASS.
Allen W. Jackson and Charles M. Baker, Architects.



FIG. 92. RESIDENCE OF SAMUEL D. STEVENS, ESQ., MARBLEHEAD, MASS.
Allen W. Jackson and Charles M. Baker, Architects.



FIG. 93. RESIDENCE OF SAMUEL D. STEVENS, ESQ., MARBLEHEAD, MASS.
Allen W. Jackson and Charles M. Baker, Architects.



FIG. 94. SOUTH FRONT—RESIDENCE OF EDWARD C. GUDE, ESQ., WHITE PLAINS, N. Y.
William Lawrence Bottomley, Architect.



FIG. 95. EAST END—RESIDENCE OF EDWARD C. GUDE, ESQ., WHITE PLAINS, N. Y.
William Lawrence Bottomley, Architect.

South few servants live in the house, scarcely occurs outside of California. On the other hand, the cellars made necessary in the North by artificial heating, which are relatively inexpensive owing to the deep foundations required in any case, take care of many minor phases of service. Motives of economy and convenience, of course, suggest that the excavation be carried no lower than below the frost level, giving the "light cellars" so beloved of the American philistine of the nineteenth century; but appreciation of the aesthetic merit of keeping the house close to the ground has now made deep excavation and lighting by areas universal in good work. This gives the further advantage of permitting direct access to terraces and lawns on all sides by means of French windows which have thus multiplied rapidly in recent years, when not forbidden by close adherence to a chosen style.

The desire to keep the house low has led in the past fifteen years to a wide reversion to the scheme of the "story-and-a-half" house, such as the Colonial farm house with its eaves at the second floor level. First used with notable success by Mr. Keen, and afterwards widely popularized by Mr. Embury as "Dutch Colonial," this essentially modern effort to provide livable rooms in a roof by the aid of wide eaves projection or the employment of the gambrel, although now a trifle hackneyed, still has many adherents. It involves the development of the "long dormer" and the "sunk dormer" and has advantages for the unity of the whole in permitting a single eaves level for house and porches. Interesting variants on it appear in the Witherspoon (Fig 89) and Stevens (Fig. 91) houses. A novel experiment in placing two stories of minor rooms against the living room is seen in Mr. Bottomley's Gude house on Long Island (Fig. 94), with its pseudo-Connecticut doorway. When there is a full second story the desire for lowness and appreciation of the superiority of unbroken roofs tends increasingly to cause the suppression of dormers, even



FIG. 96. HOUSE DOOR—RESIDENCE OF EDWARD C. GUDE, ESQ., WHITE PLAINS, N. Y. WILLIAM LAWRENCE BOTTOMLEY, ARCHITECT.



FIG. 97. RESIDENCE OF DR. R. BISHOP CANFIELD, ANN ARBOR, MICH. LOUIS H. BOYNTON, ARCHITECT.

though, in the case of hip roofed houses, this involves the loss of all habitable room in the third story. With a fundamentally mediaeval style such dormers can be managed, and dormers and gables are utilized in the Watson Webb house



FIG. 98. RESIDENCE OF DR. R. BISHOP CANFIELD, ANN ARBOR, MICH.
Louis H. Boynton, Architect.

(Fig. 20) to make the whole third story available for comfortable guest rooms. In general, however, even servants' rooms are now rarely provided there, being placed, with better relation to their use, in the second story of the service wing or even on the ground floor.

In its architectural treatment the exterior of the house is governed in general by the tendencies of style discussed above. The choice of historic suggestion once made, sympathetic interpretation of this is, except in the modernist work, almost the principal effort, and the range of personal liberty includes chiefly matters of proportion, texture, and detail. By themselves, however, these offer wide possibilities of success or failure, as well as of variety of effects. In the wall today simplicity of membering goes hand in hand with search for novelty and beauty of texture. Any form of pilaster



FIG. 100. RESIDENCE OF WALTER RICH, ESQ., ATLANTA, GA. HENTZ, REID & ADLER, ARCHITECTS.



FIG. 99. RESIDENCE OF WALTER RICH, ESQ., ATLANTA, GA.
Hentz, Reid & Adler, Architects.



FIG. 101. RESIDENCE OF I. HELLER, ESQ., CEDAR LAKE, WIS.
Brust & Philipp, Architects.

treatment in country houses is now of extreme rarity, and detail is concentrated on doorway, porch and cornice as exclusively as in early Colonial days. When wood is retained as a material the effort which are obviously overstrained. Stucco, widely recommended not only by its technical development but by Italian and English vogues, has numerous potentialities. Smooth floating, pebble dash,

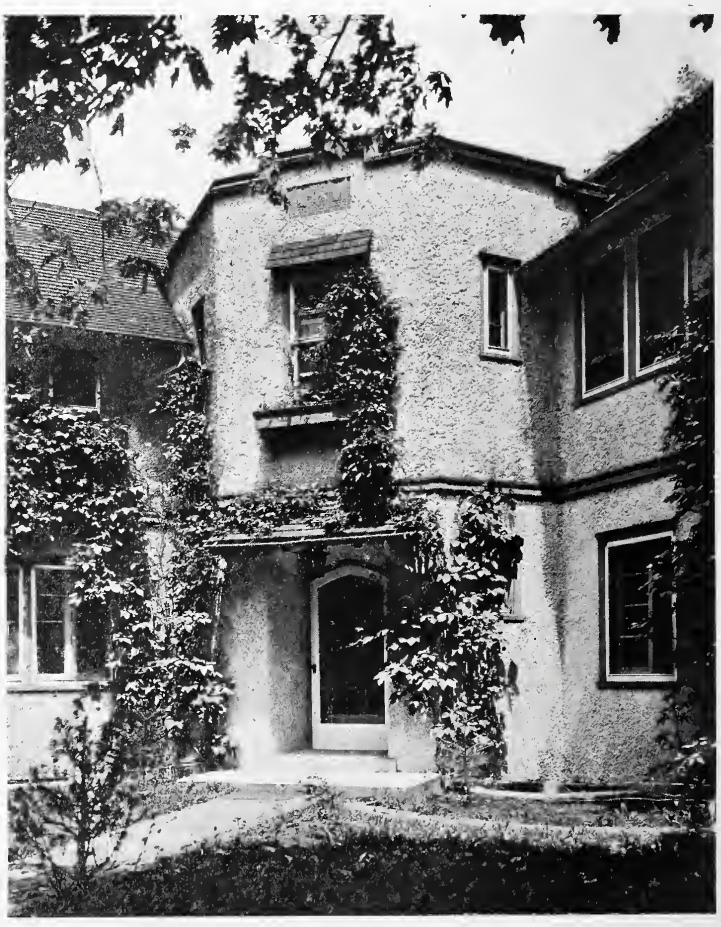


FIG. 102. RESIDENCE OF I. HELLER, ESQ., CEDAR LAKE, WIS.
Brust & Philipp, Architects.

is to escape from banality by the use of wide clapboards, long shingles or coverings of trellis. In brick the rage for textures has run riot to such an extent that, along with many commendable for their richness and softness of color, a multitude of striking effects are secured and brushing all have their adherents, but the fashion of the moment is for the rough trowelling seen in the Appleton (Fig. 109) and Lloyd (Fig. 29) houses. Tinting and washing to show selected aggregates give a welcome opportunity for color. In stone the popularity of the



FIG. 103. RESIDENCE OF J. A. HITCHCOCK, ESQ., NASHVILLE, TENN.
Dougherty & Gardner, Architects.



FIG. 104. RESIDENCE OF SIGMUND MONTAG, ESQ., ATLANTA, GA.
Hentz, Reid & Adler, Architects.



FIG. 105. RESIDENCE OF SIGMUND MONTAG, ESQ., ATLANTA, GA. HENTZ, REID & ADLER, ARCHITECTS.



FIG. 106. HOUSE DOOR—RESIDENCE OF SIGMUND MONTAG, ESQ., ATLANTA, GA. HENTZ, REID & ADLER, ARCHITECTS.



FIG. 109. RESIDENCE OF ROBERT APPLETON, ESQ., EAST HAMPTON, L. I. FRANK E. NEWMAN, ARCHITECT.



FIG. 107. MAIN ENTRANCE—RESIDENCE OF G. S. GAYLORD, ESQ., NEENAH, WIS.
Childs & Smith, Architects.



FIG. 108. RESIDENCE OF ROBERT APPLETON, ESQ., EAST HAMPTON, L. I.
Frank E. Newman, Architect.



FIG. 110. RESIDENCE OF ROBERT APPLETON, ESQ., EAST HAMPTON, L. I. FRANK E. NEWMAN, ARCHITECT.



FIG. 111. DINING ROOM—RESIDENCE OF SIGMUND MONTAG, ESQ., ATLANTA, GA.
Hentz, Reid & Adler, Architects.



FIG. 112. LIVING ROOM—RESIDENCE OF SIGMUND MONTAG, ESQ., ATLANTA, GA.
Hentz, Reid & Adler, Architects.



FIG. 113. LIVING ROOM—RESIDENCE OF LEROY P. LEAS, ESQ., OVERBROOK, PHILADELPHIA, PA.
Charles Barton Keen, Architect.



FIG. 114. DINING ROOM—RESIDENCE OF LEROY P. LEAS, ESQ., OVERBROOK, PHILADELPHIA, PA.
Charles Barton Keen, Architect.



FIG. 115. RECEPTION ROOM—RESIDENCE OF WALTER MACH, ESQ., ANN ARBOR, MICH.
Louis H. Boynton, Architect.

Pennsylvania ledge-stone has led to widespread imitations with local materials, often with violence to their own properties, and even, in some instances, to transportation of the Pennsylvania stone to distant States such as Michigan, not only in violation of the very principle of its use but to the neglect of an extremely interesting rusty native ledge-stone. Were the principle of using local materials really more widely applied, far more good stone work would be done than at present.

Window treatment perhaps more than any other feature is dependent on choice of style, and leaded casements appear with the adoption of any mediaeval suggestion. In spite of the advantages of casements in increasing ventilation and the overcoming of some of its difficulties by improved steel sash, our constant reversion to the double hung window is not accidental—as is proved by the preference which the modern English architect and housewife alike give to it. Casement and sash window are both small-paned, almost without exception. Only in the work of the modernists is there any attempt to give greater interest to their treatment by substituting varied designs for the stereotyped equal rectangles.

In roof treatment the academic spirit makes the level cornice line normal and the hip roof frequent. The eaves at present are rarely given the extreme projections of a few years ago, seen here only in the Moore house in Kansas City (Fig. 46); on the contrary, we find, in the Hess house (Fig. 41), Mr. Howells using as his cornice the single great moulding of the Villa Madama. Roof parapets and eaves balustrades are almost wholly lacking, whether in Elizabethan



FIG. 116. STAIRCASE HALL—RESIDENCE OF WALTER MACH, ESQ., ANN ARBOR, MICH. Louis H. Boynton, Architect.



FIG. 117. ENTRANCE HALL—RESIDENCE OF DR. EDWARD B. KRUMBHAAR, WHITMARSH VALLEY, PA.
Arthur H. Brockie, Architect.

or post-Colonial revivals. On the other hand great attention is given to the texture and color of the roof itself. The shingles of the Colonial style are sawn and laid with slight irregularity; the so-called "thatched shingle" with its bolder curvature, while somewhat discredited by rank imitations, is still undergoing fresh development, as in the Appleton house (Fig. 109), with its heavy mass of shingles not steamed but shaped to the roof as laid. Graded and variegated slates and tile, both flat and curved are an ever increasing resource. The Moore residence has a variegated "fire flash" Spanish tile, the Hess house a remarkable special tile sprayed with moss green.

The handling of interiors has undergone a change of fashion in the last five years, the dominant vogue becoming Italian instead of Georgian or Adam. Under the leadership of Mr. Platt and Mr. Henry Forbes Bigelow, paneling has given way to broad surfaces of plaster, enriched only by an occasional tapestry or heavily carved mirror in old gilt, and crowned by groined arches or coffered ceilings. Mantels and occasional doorways of carved stone, gates, lanterns and sconces of metal, floors of tile, and sparing furniture heavily carved carry out the effect. Such fashions are not adopted instantly or universally, and a number of fine Georgian and Adam or McIntire interiors are still being done, especially in regions of strong Colonial tradition—witness the Montag house at Atlanta (Fig. 112) and the house at Overbrook (Fig. 113). The hall of the Krumbhaar house at Whitemarsh Valley (Fig. 117), however, shows how even in a panelled Georgian room furniture of an earlier and more Italian character replaces the work of the eighteenth century cabinet makers, and in Mr. Rich's living room at Atlanta (Fig. 118) the victory of the Italian is complete. Most interesting in their illustration of the new tendency are the rooms of the Baker residence at Kewanee (Fig. 119), with their plain walls, rich plaster ceilings, and dependence almost entirely on the carved or painted furniture for their success. A novelty is the treatment of the sun room in Della



FIG. 118. LIVING ROOM—RESIDENCE OF WALTER RICH, ESQ., ATLANTA, GA.
Hentz, Reid & Adler, Architects.

Robbia faience. The old French treatment of the living room of the Gaylord house at Lake Winnebago (Fig. 124) is really but a variant of the Italian manner; and Elizabethan suggestions, whether strict or free, are today relatively rare.

The studied chastity of the Italian work, or the feeling which underlies it, is responsible also for a new simplicity in Colonial interiors, which shows itself by a reversion to the homespun work of the earlier eighteenth century farmhouse. Bare plaster, with paneling only on the chimney walls, mantelless fireplaces, rag rugs, and—with more regard for archaism than for consistency of style—the hewn beamed ceilings of the seventeenth century, mark the Gude (Fig. 128), Whitney (Fig. 129), Kelley (Fig. 132) and one or two other houses. While in all this there is no doubt a healthy reaction from the extreme formality and stereotyped repetition of the Adam work of the day just past, no conclusion should be formed that anything more fundamental is indicated than a change of fashion itself destined to become equally banal tomorrow. To be "in good taste" in interior decoration and furnishing nowadays seems to consist, like being in fashion, in doing what everyone else is preparing to do, and stopping before they begin.

The surroundings of the American country house are at once less intensively developed and less formal than those of the English house. For this there are several causes: the relatively lesser fondness for flower gardens and the greater expense of maintaining them, the dislike of near neighborhood of the kitchen garden and stables, the absence of the Elizabethan tradition of formal paneling out of the whole immediate surroundings in sharply marked rectangular areas for definite purposes; and, finally, the strength and saneness of American traditions of informal landscape design, based not on artificial picturesqueness but on preservation and expression of the native and local character. Italian influence in re-



FIG. 119. HALL—RESIDENCE OF E. E. BAKER, ESQ. KEWANEE, ILL. FREDERICK W. PERKINS, ARCHITECT.



FIG. 120. STAIRCASE—RESIDENCE OF E. E. BAKER, ESQ., KEWANEE, ILL. FREDERICK W. PERKINS, ARCHITECT.



FIG. 121. DINING ROOM—RESIDENCE OF E. E. BAKER, ESQ., KEWANEE, ILL.
Frederick W. Perkins, Architect.



FIG. 122. LIVING ROOM—RESIDENCE OF E. E. BAKER, ESQ., KEWANEE, ILL.
Frederick W. Perkins, Architect.



FIG. 123. SUN ROOM—RESIDENCE OF E. E. BAKER, ESQ., KEWANEE, ILL.
Frederick W. Perkins, Architect.



FIG. 124. LIVING ROOM—RESIDENCE OF G. S. GAYLORD, ESQ., NEENAH, WIS.
Childs & Smith, Architects.



FIG. 125. LIVING ROOM—RESIDENCE OF CHARLES A. WIMPFHEIMER, ESQ., LONG BRANCH, N. J.
Harry Allen Jacobs, Architect.



FIG. 127. CARD ROOM—RESIDENCE OF ROBERT APPLETON, ESQ. EAST HAMPTON, L. I.
Frank E. Newman, Architect.



FIG. 126. BREAKFAST ROOM—RESIDENCE OF ROBERT APPLETON, ESQ., EAST HAMPTON, L. I.
Frank E. Newman, Architect.



FIG. 128. DINING ROOM—RESIDENCE OF EDWARD C. GUDE, ESQ., WHITE PLAINS, N. Y.
William Lawrence Bottomley, Architect.



FIG. 129. LIVING ROOM—RESIDENCE OF H. P. WHITNEY, ESQ., GLEN COVE, L. I.
Charles Willing, of Furness, Evans & Co., Architect.



FIG. 130. STAIRCASE—RESIDENCE OF H. P. WHITNEY, ESQ., GLEN COVE, L. I.
Charles Willing, of Furness, Evans & Co., Architect.



FIG. 131. DINING ROOM MANTEL—RESIDENCE OF MRS. ALBERT B. KELLEY, RADNOR, PA. WILSON EYRE & McILVAINE, ARCHITECTS.



FIG. 132. LIVING ROOM—RESIDENCE OF MRS. ALBERT B. KELLEY, RADNOR, PA.
Wilson Eyre & McIlvaine, Architects.



FIG. 133. HALL AND STAIR—RESIDENCE OF E. H. FITCH, ESQ., MEADOWBROOK, PA.
Tilden & Register, Architects.



FIG. 134. MASTER'S ROOM—RESIDENCE OF E. H. FITCH, ESQ., MEADOWBROOK, PA.
Tilden & Register, Architects.

cent years has restored the formal garden and the house terrace to important places in the scheme, to its great advantage, and there has been thus some of that extension of the house proper by out-of-door living rooms which is so attractive in England and on the Continent; but such features are generally confined rather strictly to a single "garden side," and elsewhere lawn and grove sweep uninterruptedly to the base of the walls. Thus the approach drive, whether straight, balanced, or irregular, seldom terminates in a formal forecourt. An enclosed service court or yard is more common for practical reasons, but there is rarely an attempt to give it an architectural character in connection with the buildings of the service wing. The garage may be attached to the house or form a single composition with it, but stables and farm buildings, if present at all, are generally placed at some distance in a group wholly distinct, and often of most interesting individual character.

The garden itself, formerly often treated as an isolated unit at some distance from the house, is now generally laid out in intimate connection with it, accessible directly from the living rooms or from a terrace on which these open. The necessity of a sense of enclosure and privacy for the true effect and enjoyment of a garden is now also more widely recognized, and such solecisms of our early attempts at formality as the confounding of garden and forecourt are now happily rare. In its own treatment the garden shows a welcome reaction from the obtrusively architectural character of too many of the first "Italian" designs, and it is realized that vegetation rather than masonry is the essential feature of a garden. A garden unique in spirit is that of the Appleton house on Long Island, where hooded walls make a fertile little oasis in the wind-swept sand, and justify its name, "Le nid de papillon."

To sum up current tendencies in the design of the country house we need only emphasize its fundamental character of



FIG. 135. RESIDENCE OF HORATIO GATES LLOYD, ESQ., HAVERFORD, PA.
Wilson Eyre & McIlvaine, Architects.



FIG. 136. RESIDENCE OF HORATIO GATES LLOYD, ESQ., HAVERFORD, PA.
Wilson Eyre & McIlvaine, Architects.



FIG. 137. DETAIL—RESIDENCE OF H. BELLAS HESS, ESQ., HUNTINGTON, L. I. HOWELLS & STOKES, ARCHITECTS.



FIG. 138. GARDEN—RESIDENCE OF E. E. BAKER, ESQ., KEWANEE, ILL.
Frederick W. Perkins, Architect.

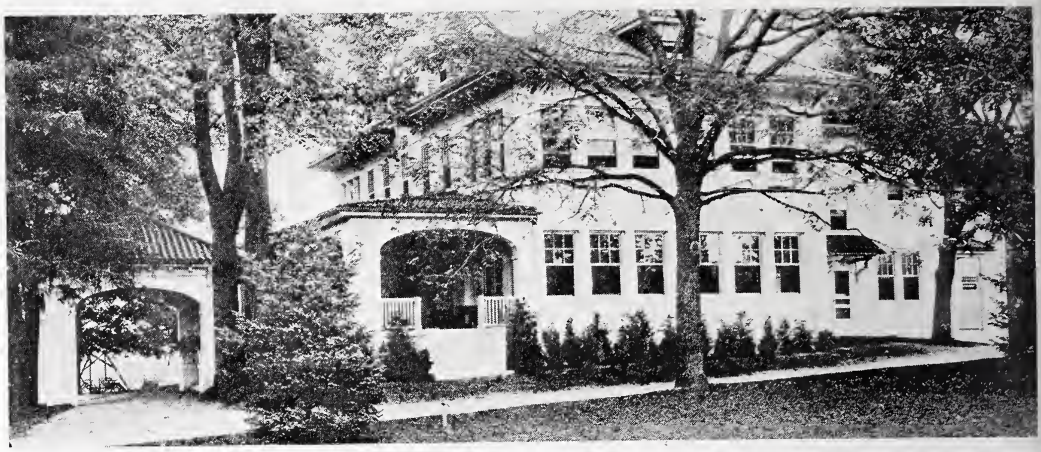
simplicity. There are no rooms not in every day use, there is no ornament, even no "architecture," and the fundamental expression—for which even the parvenu learns to strive—is that of unpretentious decency and comfort. If for the moment this sound renunciation is carried to the verge of asceticism, we may rest assured that the strictness of the regimen is not permanent. If the choice of forms is retrospective and dependent, we may quiet our artistic conscience by reflecting that our civilization itself is still fundamentally that of a passing era, and that a truly creative art can triumph only with a new social order.

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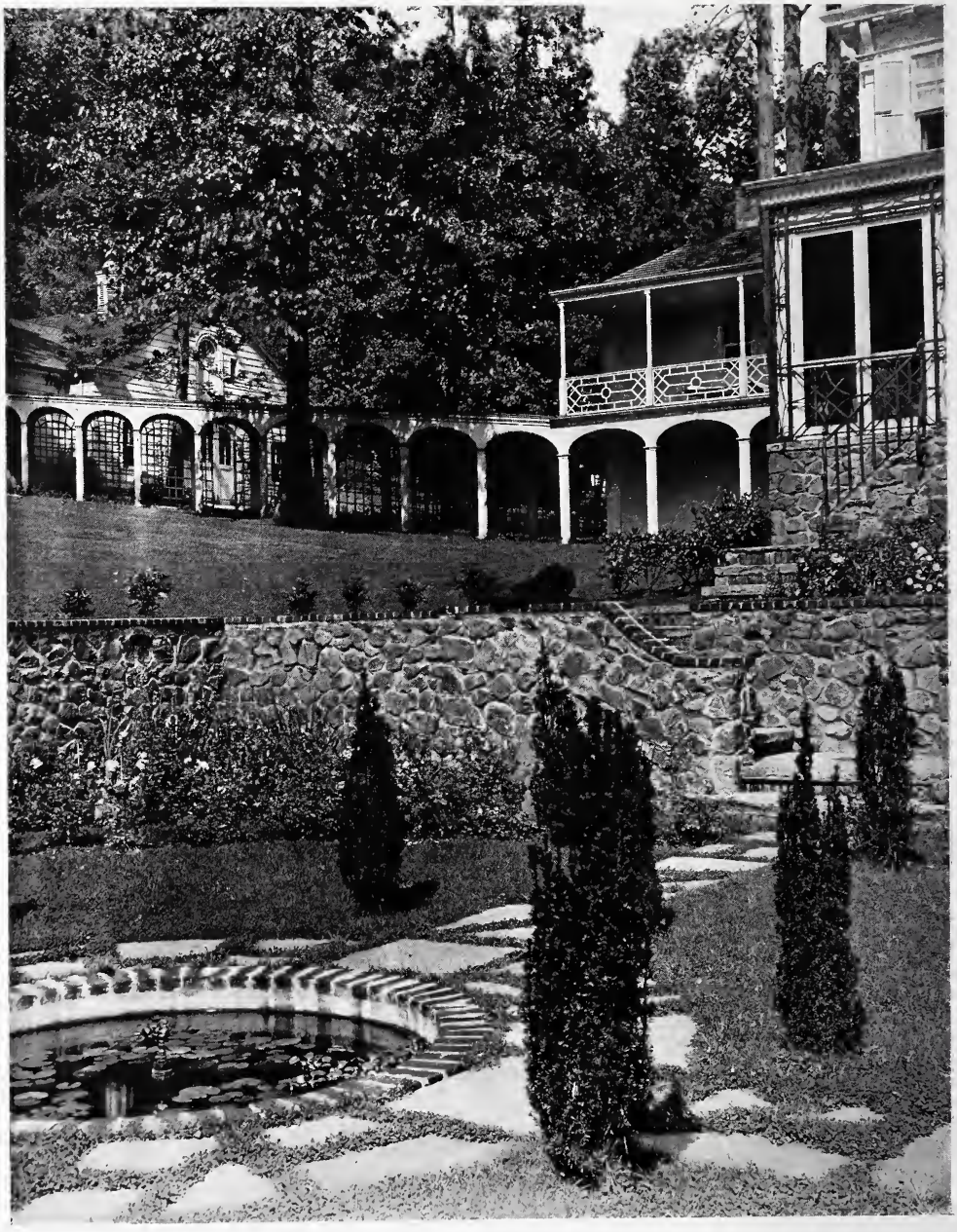
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Yearly Subscription—United States $3.00—*Foreign* $4.00—*Single copies* 35 *cents. Entered May* 22, 1902, *as Second Class Matter, at New York, N. Y. Member Audit Bureau of Circulation.*

PUBLISHED MONTHLY BY
THE ARCHITECTURAL RECORD COMPANY
115-119 WEST FORTIETH STREET, NEW YORK
F. T. MILLER, Pres. W. D. HADSELL, Vice-Pres. J. W. FRANK, Sec'y-Treas. E. S. DODGE, Vice-Pres



DETAIL OF GARDEN OF ANDREW MORRISON, ESQ., MONTCLAIR, N. J. WILLIAM EDGAR MORAN, ARCHITECT.

THE
ARCHITECTVRAL
RECORD

VOLVME XLVI NVMBER V

NOVEMBER, 1919

SOME PRINCIPLES OF SMALL HOUSE DESIGN



By John Taylor Boyd, Jr.

Part I - Design of the Plot of Land

WHAT is the most important feature in the design of houses? Without any question, it is the arrangement of the lot on which the house stands. It is unfortunate indeed that this feature is the one most often neglected. Too many architects do not give it much attention, possibly because they feel that the really intricate and highly technical details of the house itself are all that they may be expected to be responsible for; and most owners still believe that thorough design of roadways and paths, terraces and gardens, belongs properly to the great estates of the very wealthy.

Careful planning of lots is at least as essential in very small as in great estates. In large places there is plenty of land at the designer's disposal, offering sometimes opportunity for several schemes, equally good; more than one building site may be available; mistakes may be covered up. But in small places, space is cramped, every square foot counts, usually only one part of the lot is far more suitable for the house and garage than any other, and thus more skillful design is required to obtain a satisfactory result. In fact, if the house be placed only a few feet out of its correct location, this apparently slight error may forever block the creation of a charming terrace or garden enclosure that would

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be one of the finest assets of the design. If one will select some of the plot plans in these pages—as, for instance, Mr. Colby's house at Hartsdale, N. Y.—cut out a small piece of paper the size of the house, and move it over the plan only a few feet from its present location, one will be astonished to find the damage that it has done to much beauty; one will have ruined the whole plan.

As one knows more of the possibilities of design of a small house lot, the more one will wonder why our American love of outdoors has not made a cult of perhaps the sanest of all arts. "Gardening," quoth Sir Robert Bacon, "is the purest of the pleasures." It may be that there is a common impression that landscape design is too expensive for the average householder. Admitting the expense, the several hundreds or thousands invested yield a rich return to the owner. He derives therefrom many benefits. His place gains a distinction among his neighbors, and his friends are always glad to visit him in his cheerful and comfortable surroundings. In fine weather his one or two terraces and bits of lawn double the ground floor of his house plan, particularly that part devoted to recreation. He has possibilities of entertainment and recreation that the cramped quarters of his house would alone never permit.

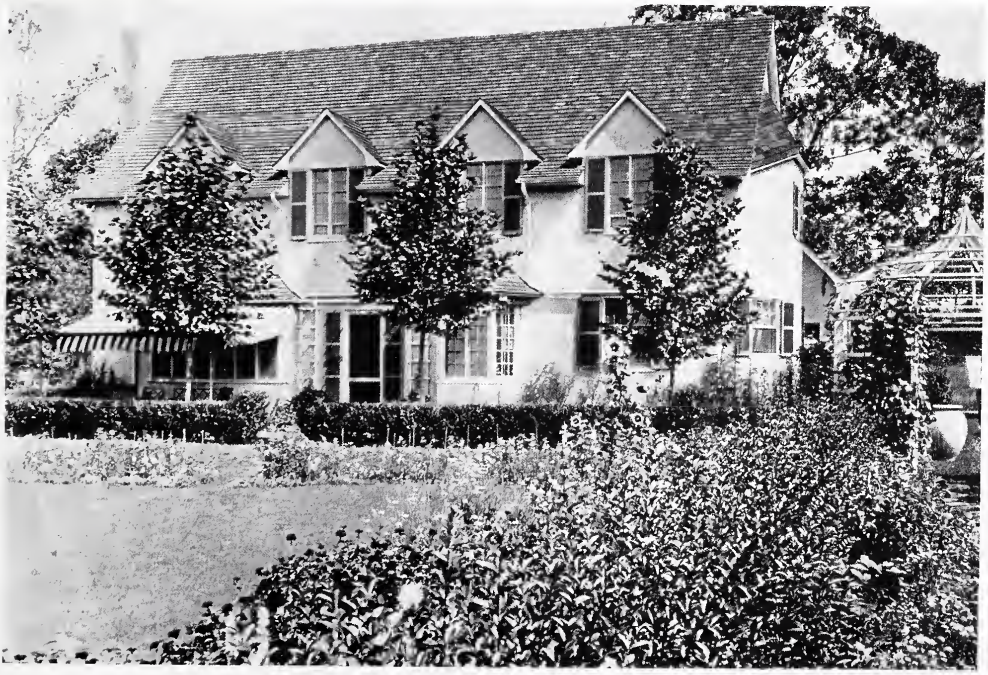
Nevertheless, like anything else in modern life, a strictly financial viewpoint is desirable before any expense is undertaken. In this connection the experience of owners who own places like these shown herewith is of value. In several cases, the place sold for a higher price than the cost of the investment. In three cases the sale was a fine business transaction. In another, an expenditure of $1,800 made the owner confident that he had added $5,000 to the real estate value of his property. Land is expensive, besides being difficult to get in the right neighborhood at the precise moment that one wants it, and why not therefore utilize it to the full. Compared with the designs here shown one may see that most of the average house owner's land plot is wasted, serves only the purpose of drying his laundry one day in the week. This seems uneconomical when a few hundred dollars might reclaim it for useful and delightful purposes. Besides—and this point should not be overlooked—since much of the value of good garden design depends on but a few growing things and a little masonry and a few years time, an outdoor room is cheap indeed compared to the cost of an indoor room with its furnishings, at present prices of building materials. Nature's drapery of shrubs and flowers may be cheaper than window hangings, grass costs less than fine rugs and a twenty-five foot tree may be had for less than a handsome oak table. In fact one may conclude that it is sometimes cheaper to build outdoors than indoors. It should be evident that the chief effort made in the designs in these pages is not in the direction of money, but of brains—brains highly trained and provident of new ideas. One may notice that there is more variety of interest in the designs of the land than of the houses themselves, for each lot is apt to bring its own problems of shape and of peculiar topography that demand a new solution, one that cannot be found in the books. This is another way of saying that such design requires more creative than adaptive skill, and therefore it is not surprising that the work shown here is the product of some of the highest professional skill in the country. One of the landscape architects whose designs appear is an authority on city planning, and on park and playground design; while two of the architects have had a hand in solving some of the biggest architectural problems in the country, in public and private structures. The other designs are the work of unusual designers among the younger men of both professions.

It is not my purpose to go too far into detail in describing individual designs. The plot plans afford the best evidence of their excellence that can be had. Good photographs are usually difficult to get, for the spaces are small and the planting interferes with the camera's eye. Beside a few points of individual merit in each, these designs, taken together, despite all their extraordinary variety, have certain qualities in common.

They emphasize three technical features of design—that is, relief, massing

and light and shade, and, most important, space relations. Without an artist's sense of space relations, good plot design will fail, though it looks simple enough at first experience. Space relations mean not only careful economy and ability to use every foot of space, but also perfect harmony and perfect co-ordination between units; by skillful use of contrast, to make the smaller and more secluded spaces seem the more cozy and intimate and charming, because near them are broader spaces, freer and more simply treated with tiny detail; which, in turn, seem grander than they actually are, because they are made to stand out by the small spaces; in a word, organization. Technically spaces should be carefully marked off from each other by pavement and wall and planting, otherwise the design is loose and weak. It lacks character. In the language of esthetics, failure to define spaces is the reason for the painful effect of the traditional American backyard.

The result of accurate, carefully co-ordinated spacing is a wonderfully enriched aspect, really dramatic, sometimes with a quiet splendor, softly glowing in lovely color and light and shade, stimulating, yet hospitable and soothing. Obviously a fourth quality must appear in such design—I mean good taste. After all, one must live day by day in these designs; they are people's homes. They are no places for acrobatics of art. All these plans would be horrible failures in execution, theatrical and tawdry, had not the designer had something of the serpent's wisdom; did he not know how to get his effects simply and quietly; when to temper his boldness with subtlety. One of the most striking illustrations of how good taste must execute a plan to avoid all stagey effect is the garden in Rochester, N. Y., designed by Mr. Sibley C. Smith. Mr. Smith did not hesitate to set down a bold semi-circular motive, geometrical, with octagonal and diagonal variants of the type one looks for in the great gardens of palaces and manors, right into an American backyard. He succeeded, because he knew how to give in relief just those simple,



RESIDENCE OF FRANK A. COLBY, ESQ., HARTSDALE, N. Y
Architect and Owner.



RESIDENCE OF FRANK A. COLBY, ESQ., HARTSDALE, N. Y.

homely touches of wood fences and lattice and wood benches; homely, yet in exquisite taste that make the design seem exactly fitted to the atmosphere of an old American city. Small wonder that he was awarded a prize for this art work at a joint professional exhibit of architects and landscape architects in Boston.

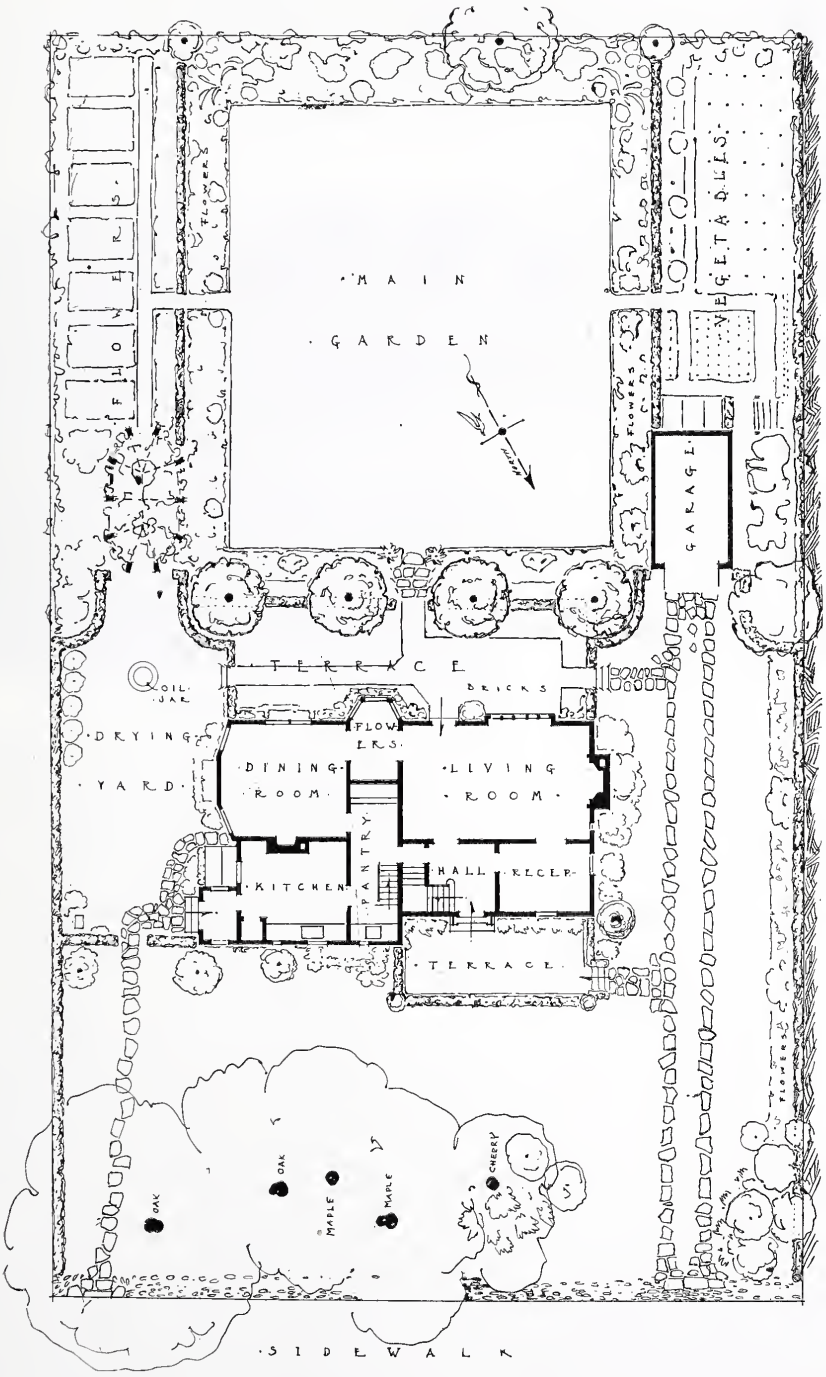
Besides their high development of the technical quality of space relationships, the practical features of these designs are noteworthy. All the functions of the household are carefully provided for and kept separate: entrance road, service to kitchen by tradesmen, and, on most of the plans, an enclosed space lettered "Drying Yard" occurs, where the outdoor domestic activities take place, without being pried upon, and without offense to the neighborhood. These service functions are taken care of, yet the best portions of the lot are left for artistic development. Here we are close to the real secret of the designs, their union of the practical with the artistic. In some of the lots there are great topographical difficulties, humps on the ground or hollows or steep slopes.

Another truth is brought out by a study of lot planning; that is, that the character of the lot determines the character of the house itself. As regards the house plan, the gardens, terraces, entrance ways and service arrangements, fixed as they are by the shape and configuration of the land, in their turn settle the arrangement of the rooms indoors, whether living portions, stairs, or the service with its intimate relation of kitchen to dining room. The plan of the house almost evolves from the design of the lot. This of course has a bearing on the style of architecture of the house. Since its lines must run in harmony with masses of planting, of walls and terraces, certain lots will call for low proportioned houses of quiet broad wall spaces, while others will demand taller buildings. This is why so many houses, though good in themselves and looking well in drawings, somehow fail to impress one when built. They do not look to be built for the lot, but have the air of having been moved there from somewhere else.

It will be seen that the house designed



RESIDENCE OF FRANK A. COLBY ESQ., HARTSDALE, N. Y.



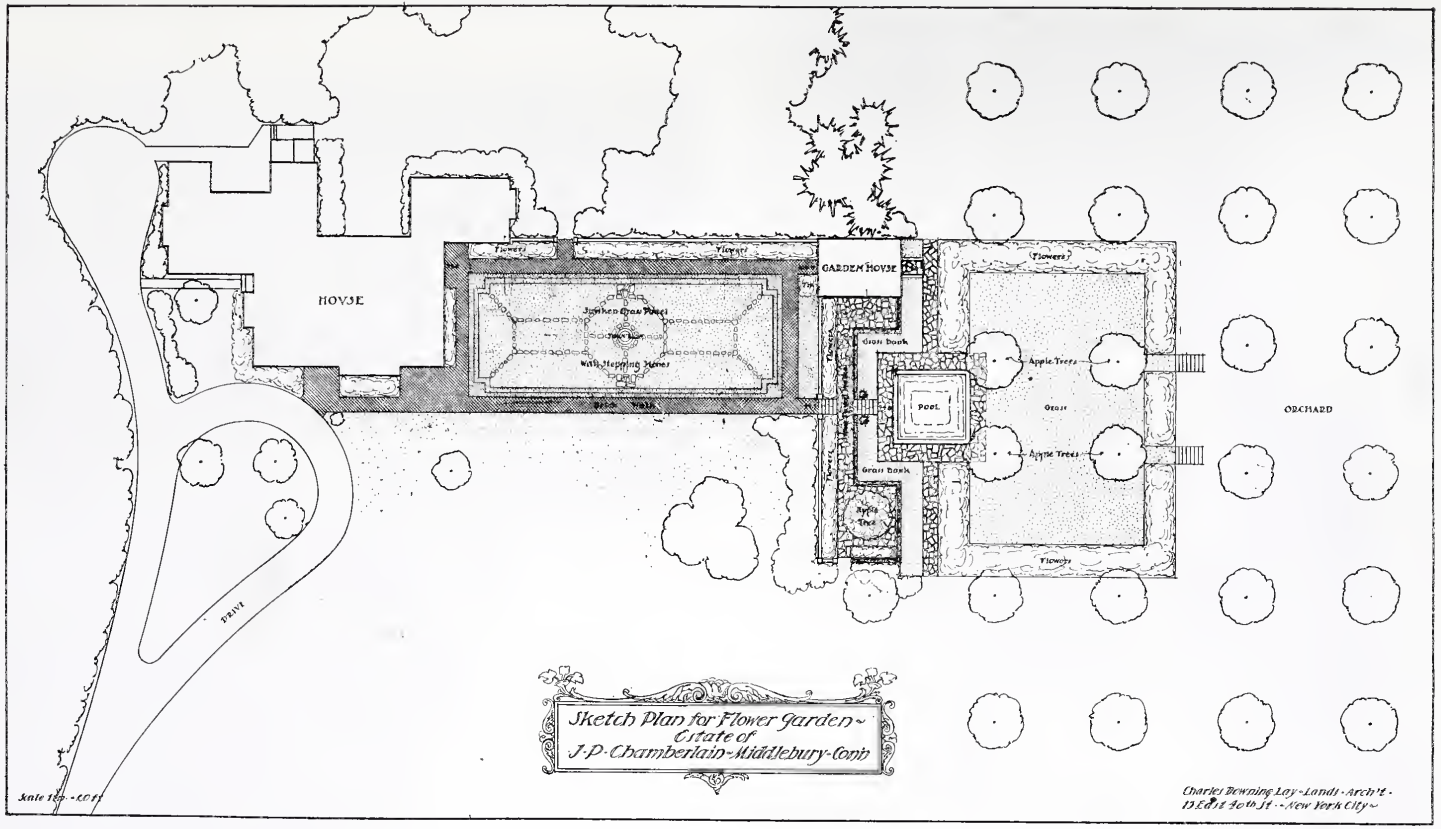
RESIDENCE OF FRANK A. COLBY, ESQ., HARTSDALE N. Y., ARCHITECT AND OWNER



RESIDENCE OF J. P. CHAMBERLAIN, ESQ., MIDDLEBURY, CONN.
Charles Downing Lay, Landscape Architect; Theodate Pope, Architect.

by Mr. Frank A. Colby for himself is a classic example of these principles of small house design. In the first place, the lot has no peculiar characteristics. It is just an ordinary flat town lot, 175 feet by 100 feet on the south side of an east and west street—the same problem that thousands of Americans tackle every year all over the country. Perhaps the nearest things to a "feature" were a few trees near the street. Yet what a singular work of art has the architect wrought. The house is an integral part of the lot plan; in fact, every unit in it, from bush to bathtub, has a particular place in the scheme, in which things are so interrelated that nothing could be moved or changed without damage to the design of the whole. It is apparent that the factor of space relationships is cultivated to an unusual degree especially in the front lawn, which is made to appear greater by two devices. No paths or roads break it up; instead lines of large flat stones lead to garage and to kitchen. And the small paved terrace at the front door, bordered with a tiny hedge and making the entrance seem hospitable and cheerful, by contrast emphasizes the expanse of the lawn. On the garden side, another terrace—an outdoor living room—acts likewise to make the long flower garden seem extensive. In itself it is made more interesting by little vistas towards garage and towards an oil jar, where one comes upon a turn and is surprised by a little odd-shaped summerhouse. The terrace is delightfully shaded by a line of small baytrees. In fact, until one had seen it, one could hardly believe that so much variety and interest could be encompassed in so small a space. It affords spaciousness and variety such as one would only expect to find in great estates. The taste in which the design is carried out is faultless. There is no excessive use of garden architecture, such as ungainly pergolas, nor overelaborated flowerbeds. One will recognize certain elements as of European ancestry, like the baytree shaded terrace outside the living room, but mostly it is just fine old-fashioned American. It is a design that wears well.

Another scheme for a flat lot, con-



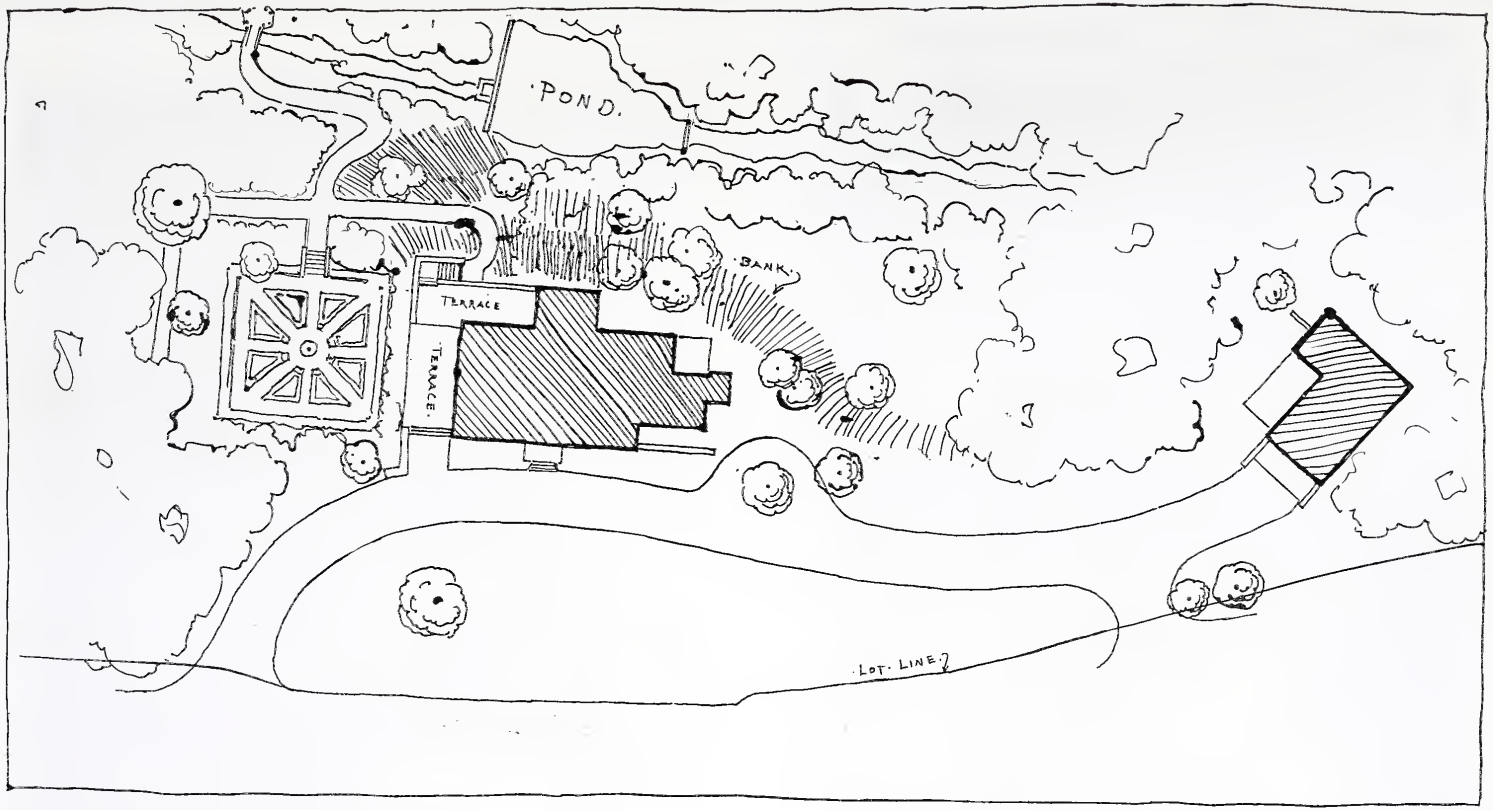
RESIDENCE OF J. P. CHAMBERLAIN, ESQ., MIDDLEBURY, CONN. CHARLES DOWNING LAY, LANDSCAPE ARCHITECT: THEODATE POPE, ARCHITECT.



RESIDENCE OF WALTER M. BENNETT, ESQ., GREENWICH, CONN.
Theodore E. Blake, Architect.



RESIDENCE OF WALTER M. BENNETT, ESQ., GREENWICH, CONN.
Theodore E. Blake, Architect.



RESIDENCE OF WALTER M. BENNETT, ESQ., GREENWICH, CONN. THEODORE E. BLAKE, ARCHITECT.



RESIDENCE OF WILLIAM DEWEY, ESQ., GREENWICH CONN.

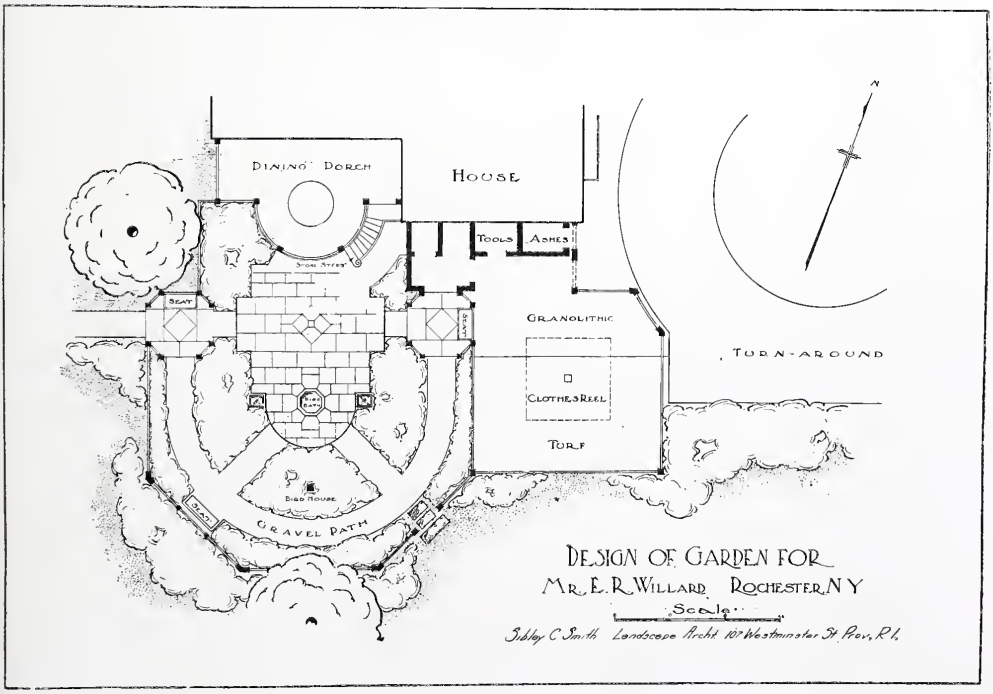


RESIDENCE OF WILLIAM DEWEY, ESQ., GREENWICH, CONN.



RESIDENCE OF E. R. WILLARD, ESQ., ROCHESTER, N. Y.
Sibley C. Smith, Architect.

ceived in a different mood, is Mr. Charles Downing Lay's plan for the lot of Mr. J. P. Chamberlain at Middlebury, Conn. It is admirable for its contrast of broad greensward and massed trees with masonry walls and rock paths. The photograph shows it early in its development, before the planting had grown enough to complete the design. The broad wall spaces of the house and





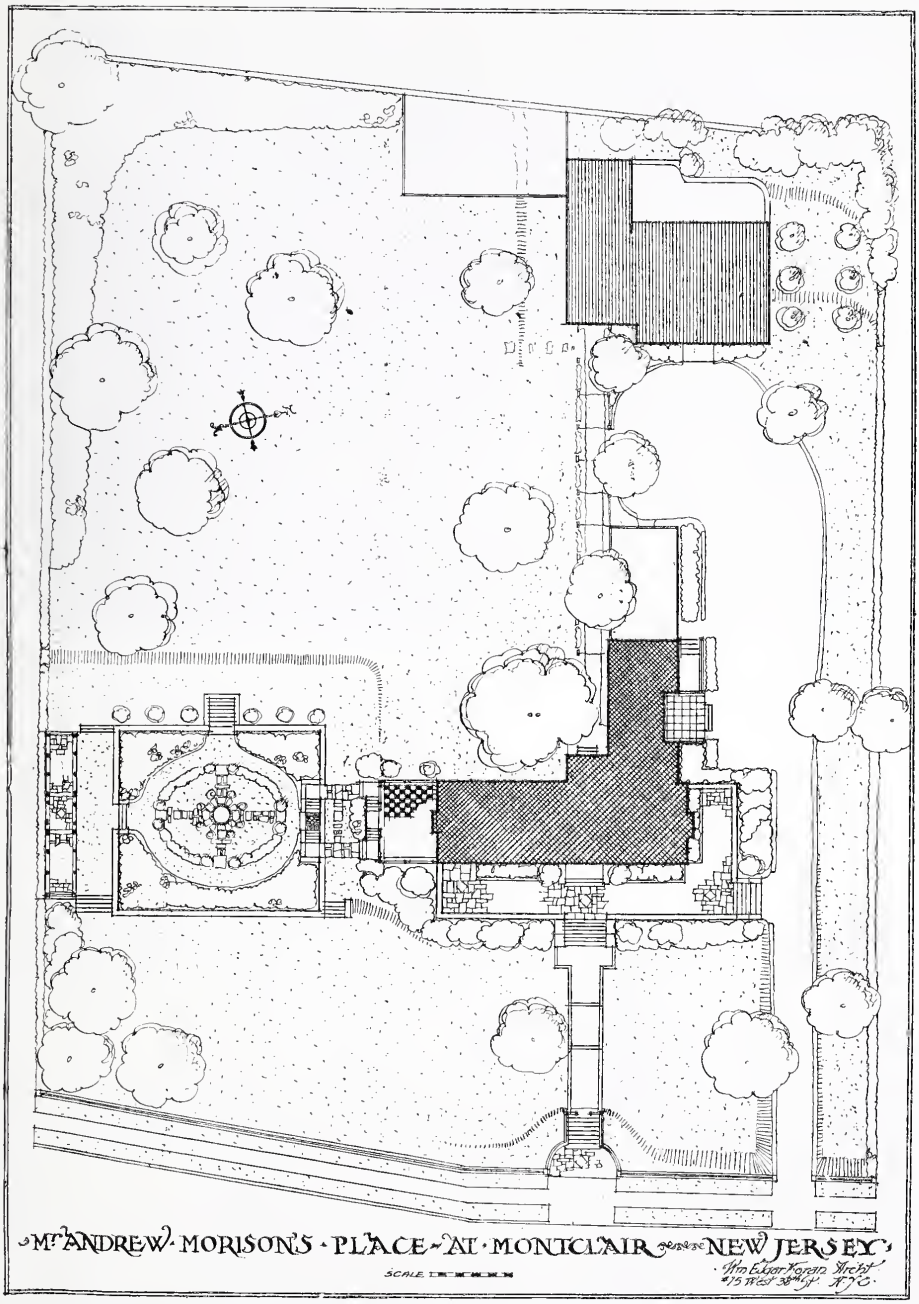
RESIDENCE OF ANDREW MORRISON, ESQ., MONTCLAIR, N. J.
William Edgar Moran, Architect

the light colored walls afford splendid backgrounds for the play of light and shade of foliage. They are strikingly adapted to the strong sunshine of the American climate, and beside them dun-colored brick walls and slate seem crude and lifeless and out of the key of color of the landscape. Incidentally, the Chamberlain garden is interesting in the expert's recognition that an apple tree is one of the most decorative trees we have to design with. The one weak point in the design is the garden house.

Mr. Theodore E. Blake's design for Mr. W. M. Bennett's grounds at Greenwich, Conn., is noteworthy for its treatment of an eccentric lot, a couple of acres in extent, long and narrow, with a steep bank sloping away from a hogback in the center, and a minor hump at one end. The house stands on the larger of the two hogbacks and the garage on the other. The house overlooks at the rear a pond formed by damming up a little brook which winds through two lines of shrubbery. A little rose garden nestles in the curve of the hogback, below the terraces of the house, and paths lead from it and from the house down to the pond and a summer house.

Mr. Sibley C. Smith's bold design for the Rochester garden has been mentioned above. It is placed right beside the kitchen yard, but is carefully sheltered from it. The practical shipshape arrangement of this kitchen yard is to be commended.

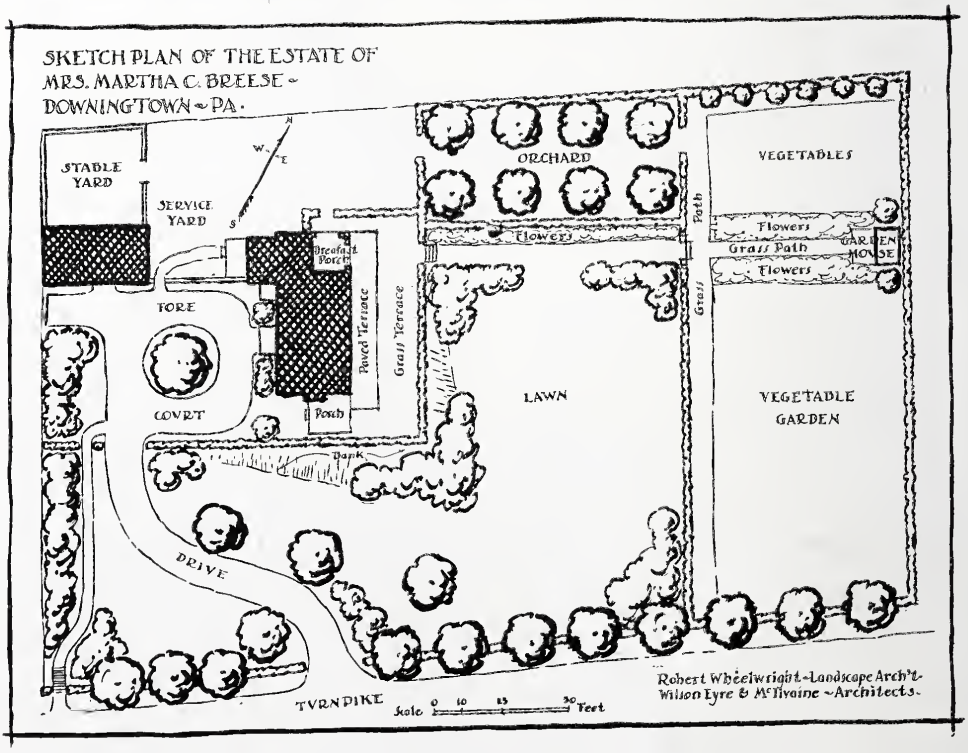
Peculiarly interesting is the little home of Mr. George Dewey, at Greenwich Conn. It is the one among all these schemes that is not the work of a professional designer. Mr. Dewey did it himself, largely with his own hands. Nor is there any reason why this should not be so. Noted doctors are summoned to give one health that one should obtain for one's self; and so are the ablest architects called upon to provide household art which myriads of laymen have known how to obtain for themselves since human time began. Indeed, if Americans had but preserved the art of their native carpenters and gardeners, and had themselves maintained—somewhat as the



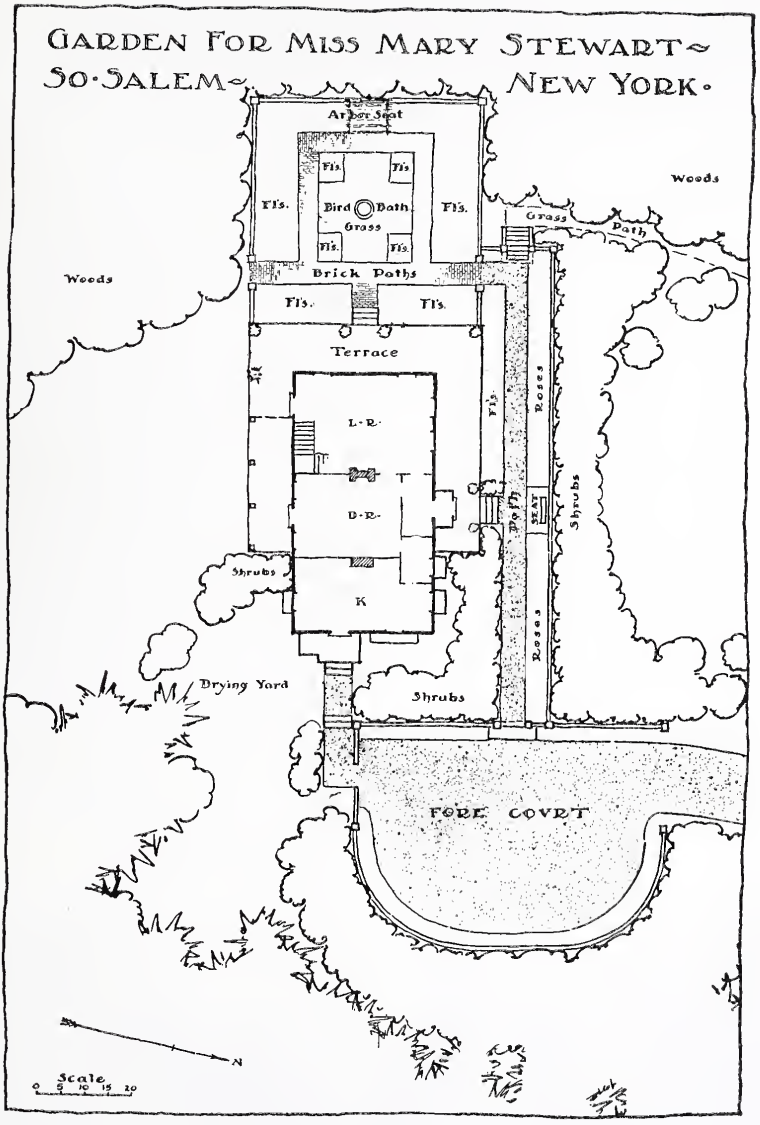
RESIDENCE OF ANDREW MORRISON, ESQ., MONTCLAIR, N. J. WILLIAM EDGAR MORAN, ARCHITECT



RESIDENCE OF MRS. KIDDER RANDOLPH BREESE, DOWNINGTOWN, PA.
Wilson Eyre & McIlvaine, Architects; Robert Wheelwright, Landscape Architect, Associate.



RESIDENCE OF MRS. KIDDER RANDOLPH BREESE, DOWNINGTOWN, PA.
Wilson Eyre & McIlvaine, Architects; Robert Wheelwright, Landscape Architect, Associate.



RESIDENCE OF MISS MARY STEWART, SOUTH SALEM, N. Y. CHARLES DOWNING LAY, LANDSCAPE ARCHITECT.

people of Philadelphia have done—the exquisitely sensitive taste of their American great-grandfathers to direct the craftsmen in their humble art, they would not need to call upon the Colbys and Blakes and Lays and Sibley Smiths to show them how to make their homes. It was Mr. Blake who called my attention to Mr. Dewey's achievement. The more one studies it, the more one will become convinced that here is a little masterpiece. The ground is a difficult one, for it slopes down into a hollow, where the garden and vegetable garden are. A charming little enclosed terrace, a sort of outdoor room, is found behind the house, with a vista down the long path. A row of poplars along this path screens the ugly house of a neighbor. It is interesting to note how the strong level lines of the hedges and garden wall furnish a firm base for the house, which might otherwise seem to poke up unduly.

The variety of good design of this character is endless; but with the house of Mr. McIlvaine, of the firm of Wilson Eyre & McIlvaine, designers of some of the greatest estates in America, we have an entirely different treatment. The landscape treatment is the work of Mr. Robert Wheelwright. The house has been placed on one corner of the lot, because that is the high point and because it leaves the greater part of the lot for landscape design. The rather steep slope is the reason for the winding entrance road. The house has been placed end toward the street so that its porches have fine vistas, and also to allow the design of the splendid long terrace, which overlooks gardens and lawns.

Another excellent house and garden is that of Mr. Andrew Morrison at Montclair, N. J., designed by Mr. William Edgar Moran. Here, too, the designer encountered an eccentric lot with a steep slope up towards the garage. A little earth was moved from the land just back of the house to form a terrace wall for the garden, which has thus the effect of a sunken garden. The photographs show the splendidly quiet striking appearance of the house from the street, with its fine bold horizontal emphasis of street and terrace walls, with which the long low proportions of the house harmonize so well. The designer's skill is evident in the perspective of the terrace which does not cut off the house from the street. Excellent are the outdoor character and details of the house, its sleeping porches and old-fashioned arched way leading to the garage, and also the fine details of the garden.



RESIDENCE OF MISS MARY STEWART, SOUTH SALEM, N. Y.
Charles Downing Lay, Landscape Architect.

The COMMERCIAL NATIONAL BANK BUILDING WASHINGTON, D.C.

WADDY B. WOOD, ARCHITECT

BY LEON V. SOLON

ALTHOUGH excellence in design is an abstract condition, varying according to the diverse standards of individual appraisal, it is capable of inducing results of high economic value. It is a simple matter to compute the relation that exists between the value of a site and the approximate rental procurable, which relation is a determining factor for the floor area to be provided and the expenditure to be apportioned for shell and equipment. But beyond that comparatively simple calculation lies a personal and indeterminate element, which concerns the fashion in which the problem set shall be construed by the individual in control—the architect. Upon this depends whether the building will represent in appearance the net expenditure, a greater value, or a lesser.

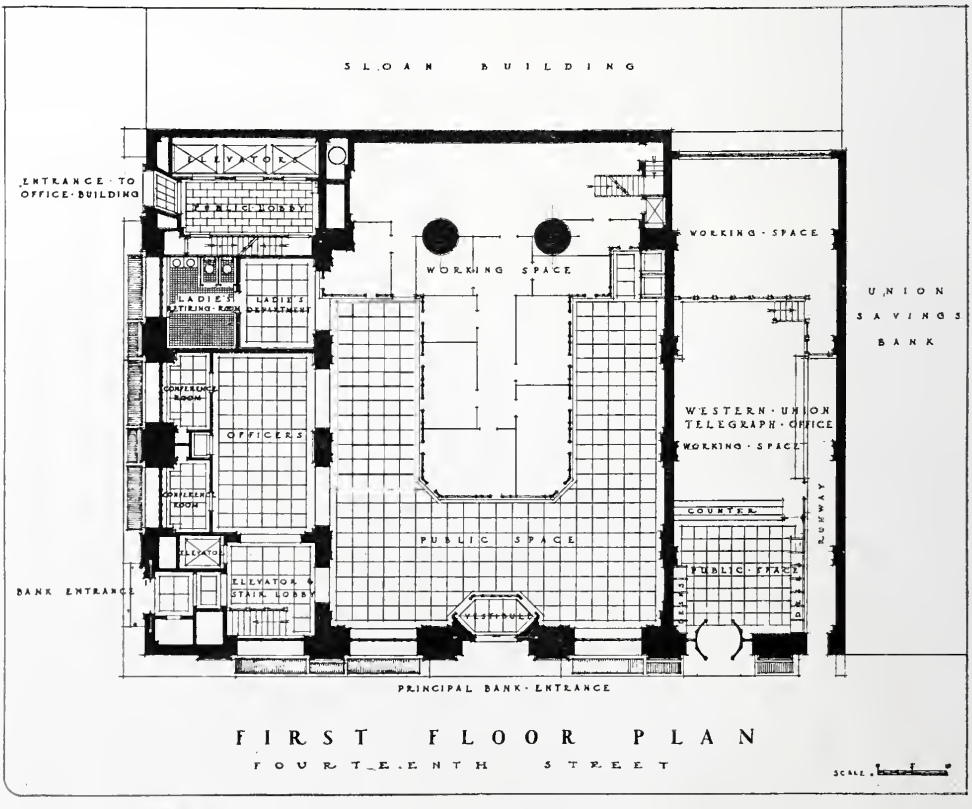
The full measure of serviceableness in a business building of the highest order is complete only when its architectural treatment has invested it with the power to stimulate a specific reaction in the minds of passers-by, which indirectly enhances the status of the occupants in public estimation. This rare quality in design is obviously of the greatest value to a banking institution, an appreciation of its worth being realized by bankers all over the United States at the present moment—a fact proved by the great number of bank projects now in hand and the importance attached to the selection of an architect.

In the strenuous competition for business waged between banks in every township and city, there is no form of advertising superior to the well designed building conveying in its appearance an impression that it reflects the character of the institution by its air of stability, dignity and security. In the realization of that pyschic property, Waddy B. Wood has been singularly successful in his design for the Commercial National Bank, in Washington, D. C. We are impressed at once that the convenience of the building for operating the routine of banking has not been sacrificed to attain superfluous niceties of stylistic treatment, or slighted for the contrivance of picturesque features. This confronts us with a modern phase of architectural evolution which is without equivalent in former times, an outcome of the modern method of reducing progressive stages of industrial and financial activities to forms of systematized procedure. Serial stages of operation, mutual relation of departments, convenience in location of equipment are the basic premises which constitute the architect's hypothesis. These may not be ignored in the least measure, whatever artistic advantage may accrue thereby. On a suitable provision for these imperative requirements, the elimination of waste energy and time depends; convenience in operation is the gauge of efficiency in the bank-architect's work, which, by a judiciously established relation between contributory activities, bridges gaps that may occur between departments at their points of contact.

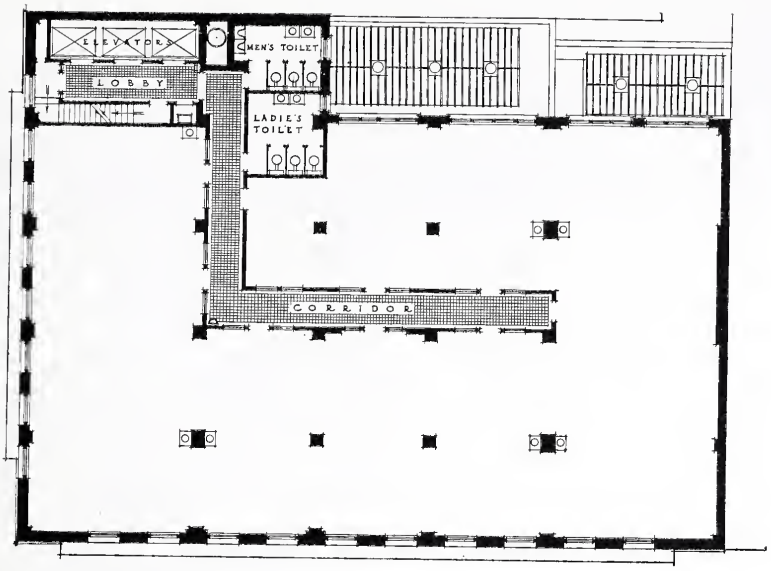
The importance now attached to accessory or subsidiary parts is thrown into high relief when we examine the extent to which it figured in the past in buildings constructed with the highest degree of artistry and the most lavish expenditure. Previous to the development of the modern point of view, which decrees certain accessory parts of every structure as essential, the builders of

former times were content to concentrate their energies on the decorative accentuation of the main idea or purpose of the building, at the expense of service or convenience. This absence of excursive thought on the part of the old time architect when devising his structures was as universal as it is incredible to us today. The vaults of the former U. S. Treasury Building in Washington stand out as an example without equal; the risks from protective measures or appliances that might have been incurred by burglars breaking in amounted only to a fraction of those attending the robbery of any well equipped modern store.

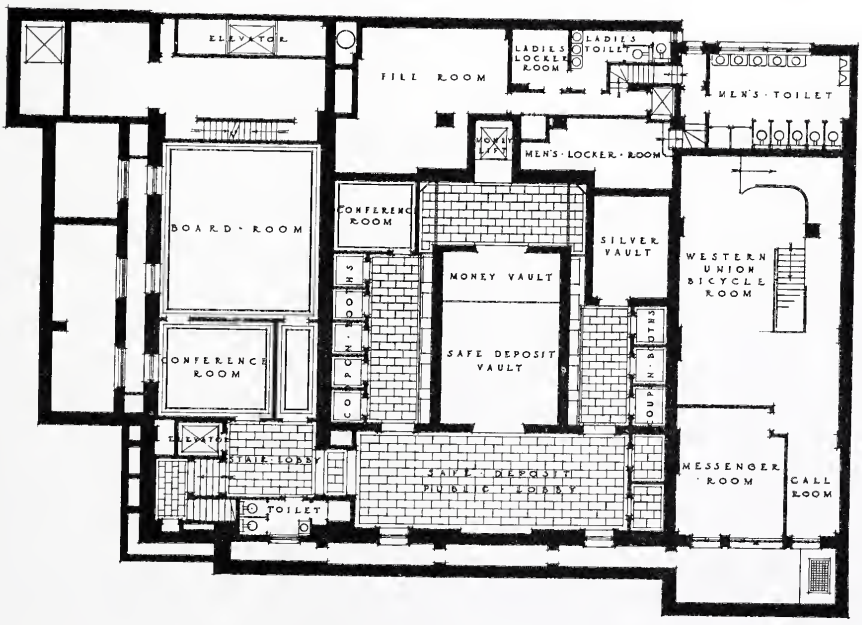
In accordance with the professional predilection for the classic styles for bank buildings, Waddy B. Wood has chosen the Doric treatment for the Commercial National Bank, but has been influenced by a rather earlier phase of the order than that which most frequently serves as a model. The simplicity of the chosen period has been carefully maintained. Decorative elaboration is focussed in the cornice, according to precedent. The pilaster and frieze treatment of the first floor is purely decorative in its architectonic function, making no false pretense at supporting the superstructure. In this respect the architect has displayed excellent judgment, thereby circumventing the pitfall into which so many of his confrères have fallen through lack of appreciation of the difficulty of endowing a number of detached columns with a sense of statical strength that is proportionate to the huge weight of superstructure involved in a skyscraper. Pateræ of varied design decorate the frieze with good effect, stimulating interest without departing from the general plan of simplicity. The guilloche border in the



COMMERCIAL NATIONAL BANK BUILDING, WASHINGTON, D. C.
Waddy B. Wood, Architect.



TYPICAL FLOOR PLAN
COMMERCIAL NATIONAL BANK BUILDING, WASHINGTON, D. C.
Waddy B. Wood, Architect.



BASEMENT PLAN
COMMERCIAL NATIONAL BANK BUILDING, WASHINGTON, D. C.
Waddy B. Wood, Architect.



CORNICE—COMMERCIAL NATIONAL BANK BUILDING, WASHINGTON, D. C.
Waddy B. Wood, Architect.

lintels serves as a link between the ornate pilaster caps, which, without this feature, would have appeared isolated in their elaboration.

The extreme simplicity of the window grille is well calculated. The assertion of vertical lines in the design augments the sense of loftiness. The circular motif framing the monogram of the institution relieves by contrast in line the upright bars of a possible lack of interest. The conventional Doric grille introduces sufficient contrast to emphasize the prevailing austerity in treatment, giving decorative value to the bars by the comparative delicacy of its detail. The use of this same type of detail in the grille over the doorway is open to criticism, as an impression is imparted by its modification there of an infiltration of pattern from the panel frames; this detracts both from the architectonic entity of the doorway and from the ornamental value of the window-grille frame.

In the proportions of the window openings the relation of height to breadth of the façade is in a measure echoed, with harmonious result. In the treatment of the windows themselves there is the inevitable feeling associated with such items in buildings of the commercial character that utilitarianism eclipses architectural simplicity; however, to differentiate between these qualities in such manner as to make economy appear an accident in the attainment of the desirable is a problem not easily solved. In the grouping of windows a valuable sense of massiveness and strength is imparted to the structure by confining their total width to that of the architectural motif ornamenting the banking floor.

The cornice is in every way satisfactory in its relation to the main scheme, both in design and in treatment of detail. The lion gargoyles are endowed with that impressiveness which the Greeks imparted to the mythological guardians of their watercourses. The metal grille design adorning the metopes is evidently evolved from a graceful Hellenic vase ornamentation of the fourth century B. C., transposed into metal without loss of character or grace.



COMMERCIAL NATIONAL BANK
BUILDING, WASHINGTON, D. C.
WADDY B. WOOD, ARCHITECT.



ENTRANCE TO OFFICES—COMMERCIAL NATIONAL BANK BUILDING, WASHINGTON, D. C. WADDY B. WOOD, ARCHITECT.



PRINCIPAL BANK ENTRANCE—COMMERCIAL NATIONAL BANK BUILDING, WASHINGTON, D C. WADDY B. WOOD, ARCHITECT.

The interior is treated with a severity which would have probably astonished the originators of the Doric order. American architects forego much in effect by their elimination of color from classic schemes. In the disposition of his carving and in the type of design adopted, Waddy B. Wood had a golden opportunity to accentuate grace by chromatic enrichment after the Hellenic manner. Greater entity would have been imparted to his pilasters, which, excellent as they are in treatment and proportion, would have been enhanced by an alternating effect of panels, produced by a judicious use of color in the ornamental frieze below the mezzanine. With the present indeterminate data on polychrome, one cannot blame an architect for hesitating to experiment on such a scale; nevertheless, one may venture to prophesy that, were color systems formulated for use with assured good result, an architect possessing Waddy B. Wood's sympathy with Greek tradition would find the attraction of such a decorative resource irresistible.

The general conception of the main hall is excellent, and the two detached Doric columns satisfactorily fulfill their important decorative function. The design of the counter screen is well-conceived; the small supporting pilasters, grouped in pairs, space its length effectively. The ceiling, of traditional type, is beyond criticism. The subdivision of the pilasters around the bank walls is agreeably contrived and proportioned.



BANKING ROOM—COMMERCIAL NATIONAL BANK BUILDING, WASHINGTON, D. C.
Waddy B. Wood, Architect.

The spaces are well thought out, both in plan and elevation, and the manner in which the mezzanine difficulty has been overcome is exemplary; only too frequently the provision for this economic necessity leads to the depreciation of clever schemes.

The lighting fixtures are successful adaptations of a Greek candelabrum of the Doric period; they are elegant in their proportions and modelled with true appreciation of early Greek ornamentation.

An economic experiment was successfully tested in this structure, adding



BANKING ROOM—COMMERCIAL NATIONAL BANK BUILDING, WASHINGTON, D.C. WADDY B. WOOD, ARCHITECT.



DOORWAY OF ELEVATOR LOBBY—COMMERCIAL NATIONAL BANK BUILDING, WASHINGTON, D. C. WADDY B. WOOD, ARCHITECT.

another link to the chain of evidence proving that architecture is capable of reflecting in its methods the social conditions of a period. The influence reflected in this structure is one which now ranks foremost in all phases of our existence—the price of labor. To meet this predominant difficulty, Mr. Wood devised the plan of using Indiana limestone blocks of uniform size. The units are of large dimensions, which saved labor in setting and reduced considerably the multiplication of units of process in construction. The blocks were set at less cost than would have been incurred had brick been employed, with the usual accessories of stone, belt courses, terra-cotta inserts, and the like—a point well worth noting for architects whose plans need adjusting to an appropriation that is not quite adequate to the design made.

Examination of this building yields the satisfactory impression that the architect has successfully used economy as a spur to achieve simple elegance in stylistic expression. This is one of the most reassuring signs of progress, not only in American architecture but also in discrimination on the part of its patrons; a craving for magnificent sham has been superseded by a desire for quality in treatment, which constitutes an actual value in architecture, irrespective of cost of material.



LOOKING TOWARD OFFICERS' QUARTERS—COMMERCIAL NATIONAL BANK BUILDING, WASHINGTON, D. C. WADDY B. WOOD, ARCHITECT.



The LAKE AVENUE BAPTIST CHURCH ROCHESTER, N.Y.

Foote, Headley & Carpenter, Architects

By I. T. Frary.

THERE is no phase of architectural practice that presents more difficulties than the remodelling of old buildings. The limitations imposed by the existing structure call for the utmost ingenuity in order to obtain the desired results; the study necessary to accomplish these results is generally out of all proportion to that involved in new work.

It would be hard to imagine a less promising undertaking of this kind than was offered to Mr. Carpenter, of Foote, Headley and Carpenter, when he was asked to evolve from the old Lake Avenue Baptist Church, in Rochester, N. Y., a modern structure to contain an auditorium seating 1200 persons and to have accommodations for 1500 pupils in a graded Sunday school requiring individual rooms for the numerous departments into which it is divided.

The old building was of a type common in the Victorian era; the plan was bad, the general design was bad, and all the detail was bad. A stone tower with a meaningless turret clinging to each corner dominated the exterior. The auditorium had the pulpit tucked off in one of the corners, while the balcony twined itself uncomfortably around the opposite sides. Back of the auditorium was a large barn-like Sunday school department.

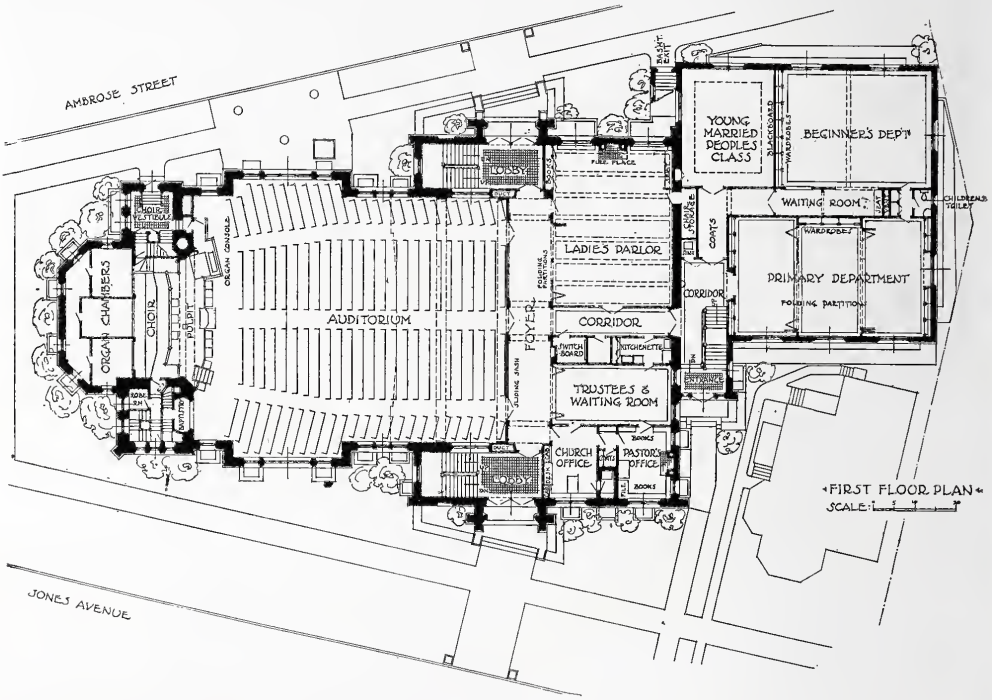
With this unpromising material to start with, the architect, retaining the greater part of the old walls, has produced a good exterior and an interesting

auditorium, while the Sunday school department has been pronounced by national Sunday school workers to be one of the most complete and best equipped in the country.

As the Sunday school is an important factor in this church organization, its quarters were given prominence by placing the main entrance foyer across

The auditorium ceiling has an interesting treatment of richly ornamented beams, which at the cornice line are supported by figure corbels. The woodwork is of oak, stained a soft gray-brown and finished flat.

The organ front is of open tracery and fretwork, behind which are hung blue and gold curtains, thus effectually



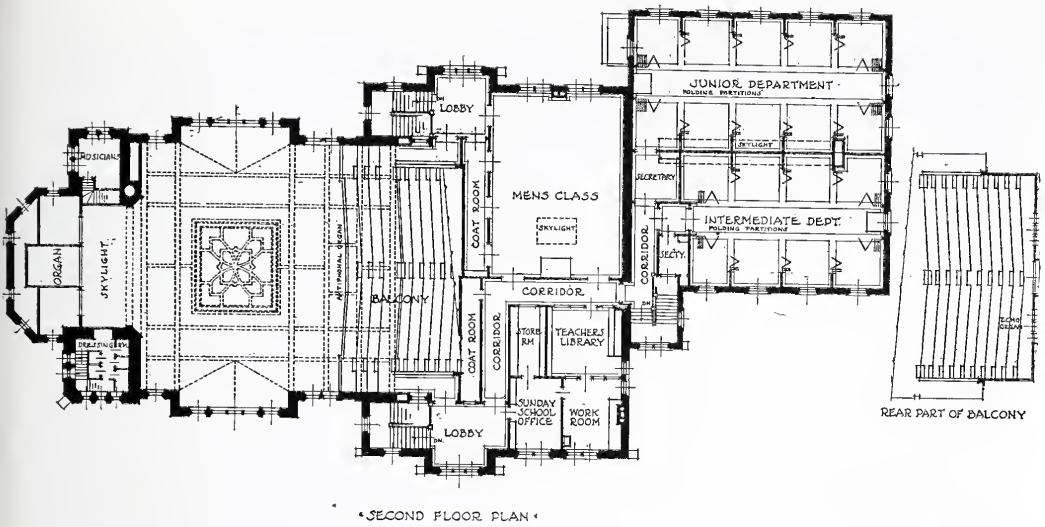
FIRST FLOOR PLAN — REMODELING AND ADDITIONS TO THE LAKE AVENUE BAPTIST CHURCH, ROCHESTER, N. Y. FOOTE, HEADLEY & CARPENTER, ARCHITECTS

the middle of the building, opening into the auditorium on one side and into the Sunday school department on the other, thus making the two departments of church activity equally accessible.

The entrance vestibules are located at either end of the foyer, and from them rise the stairways leading to the auditorium balcony and the second floor of the Sunday school.

In the design the Tudor Gothic is the dominating influence, and throughout the auditorium, as well as in other portions of the building, heraldic shields and Tudor rosettes are important elements in the decorative scheme.

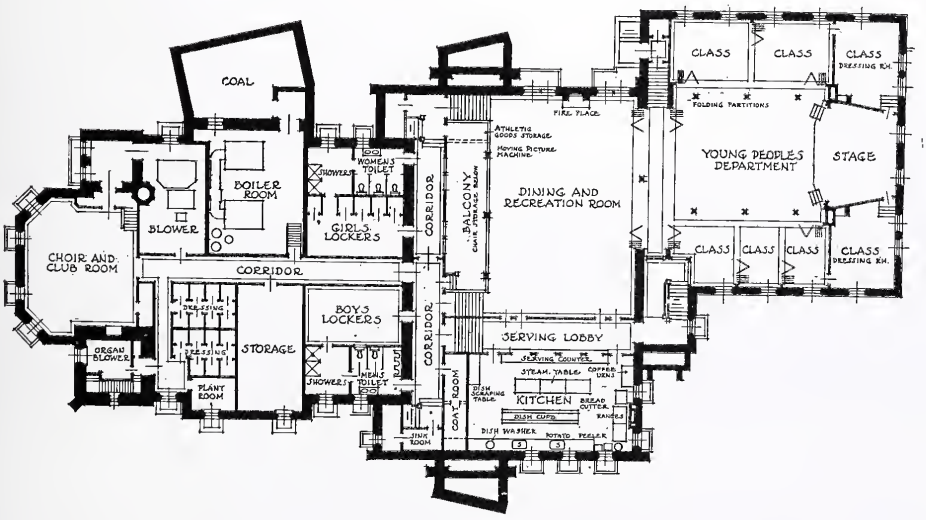
concealing the pipes without interfering with the volume of the organ. The organ console is at the right and in front of the pulpit platform; at the opposite side the baptistery is placed in a curtained alcove, which is framed in with wood tracery. From the back of the baptistery a stairway communicates with dressing rooms in the basement. A stairway from the opposite side of the chancel leads to the basement choir room. The traceried archway of the baptistery is balanced by a corresponding false arch on the other side, beneath which is a doorway for the organist's use.



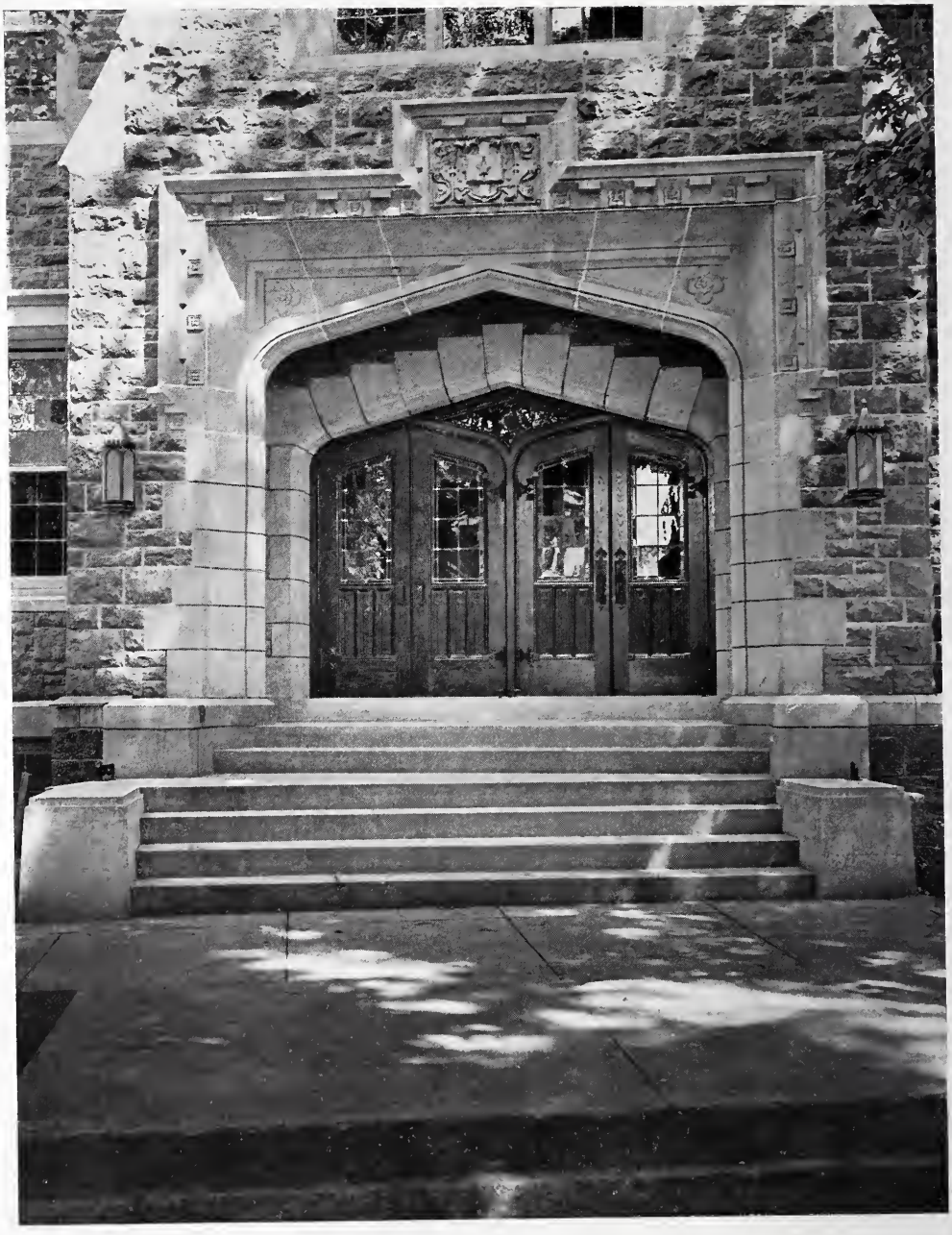
SECOND FLOOR PLAN — REMODELING AND ADDITIONS TO THE LAKE AVENUE BAPTIST CHURCH, ROCHESTER, N. Y. FOOTE, HEADLEY & CARPENTER, ARCHITECTS

The color scheme is simple, the walls being a warm gray and the ceiling panels blue. The ceiling beams, though of plaster, are treated in harmony with the woodwork and enriched with color in the ornamental members. The color made use of throughout the room is soft in tone and restricted to the carving and plaster ornament; consequently it enhances the value of the architecture.

The Sunday school department is so arranged that the rooms for the more advanced classes open from or are in close proximity to the entrance foyer;



BASEMENT PLAN—REMODELING AND ADDITIONS TO THE LAKE AVENUE BAPTIST CHURCH, ROCHESTER, N. Y. FOOTE, HEADLEY & CARPENTER, ARCHITECTS



MAIN ENTRANCE — LAKE AVENUE BAPTIST CHURCH, ROCHESTER, N. Y. FOOTE, HEADLEY & CARPENTER, ARCHITECTS.



LAKE AVENUE BAPTIST CHURCH, ROCHESTER, N. Y.
Foote, Headley & Carpenter, Architects.



LAKE AVENUE BAPTIST CHURCH, ROCHESTER N. Y.
Foote, Headley & Carpenter, Architects.



PULPIT — LAKE AVENUE BAPTIST CHURCH, ROCHESTER, N. Y. FOOTE, HEADLEY & CARPENTER, ARCHITECTS.



AUDITORIUM, TOWARD PULPIT — LAKE AVENUE BAPTIST CHURCH, ROCHESTER, N. Y.
Foote, Headley & Carpenter, Architects.



AUDITORIUM, FROM PULPIT — LAKE AVENUE BAPTIST CHURCH, ROCHESTER, N. Y.
Foote, Headley & Carpenter, Architects.



NORTH AUDITORIUM WINDOW — LAKE AVENUE BAPTIST CHURCH, ROCHESTER, N. Y.
Foote, Headley & Carpenter, Architects.



FIGURE CORBEL UNDER CEILING BEAMS — LAKE AVENUE BAPTIST CHURCH, ROCHESTER, N. Y. FOOTE, HEADLEY & CARPENTER, ARCHITECTS.



MANTEL IN PASTOR'S OFFICE — LAKE AVENUE BAPTIST CHURCH, ROCHESTER, N. Y. FOOTE, HEADLEY & CARPENTER, ARCHITECTS.



PRIMARY DEPARTMENT — LAKE AVENUE BAPTIST CHURCH, ROCHESTER, N. Y.
Foote, Headley & Carpenter, Architects.



JUNIOR DEPARTMENT — LAKE AVENUE BAPTIST CHURCH, ROCHESTER, N. Y.
Foote, Headley & Carpenter, Architects.

while the classes of children are placed in the rear section, which has its own outside entrance, thus effectually isolating the noise and confusion incident to handling large numbers of little folk.

The pastor's offices, the trustees' room and the ladies' parlor adjoin the foyer on the rear, the latter two rooms being used on Sundays as class rooms.

The rear portion of the basement is also divided into class rooms, so there is provided for the Sunday school department a completely equipped plant three stories in height. Each department is isolated, no attempt being made to gather the school together for opening or closing exercises as is common in small schools. Each department is complete in itself and a study of the three floor plans will show the sequence of grades, the youngest children starting in the beginners' department and progressing step by step through the various grades, as in day schools.

The policy of making the trustees' room and the ladies' room serve a two-fold purpose is carried into practically every portion of the building, so that the place teems with activity all the week; evening study classes, social organizations and working societies make practical use of what would in many churches be waste space during the week. In other words, the church activities are conducted with business like economy of space and everything is done to cut down the overhead expense of each department.

The large basement provides space for class and recreation rooms; for kitchen and service equipment; for locker rooms, toilet rooms, choir room and storage, as well as for the heating and ventilating plant.

This church was intended to meet not only the spiritual needs of the community in which it is placed, but also to be a social and educational center. It was desired that the establishment should have the character of a church home rather than of an ecclesiastical monument and it was essential that each form of activity should be suitably provided for.

The regular church services of course demanded an auditorium thoroughly churchly in atmosphere; the Sunday school and evening classes required an efficiency comparable to that of the public school; while the social life would naturally suggest an environment possessing somewhat of the dignity and artistic charm of a club in order that it might prove attractive not only to its members but to outsiders whom it was desirable to bring within its influence.

To meet these varied requirements necessitated close study of each individual room in relation to its functions; and as a result several of them, notably the ladies' room and trustees' room, have been given a dignified decorative treatment which is of value as an attractive setting for social functions.

The secular world long ago discovered the value of beautiful surroundings as a means of attracting people to its varied forms of entertainment; but the church has been slow to learn that a bare basement "social room" is not an effective counter attraction to the brilliant ballroom and theater and that money spent judiciously in making the church building attractive and inviting is money well invested.

Without excessive expenditure Lake Avenue Baptist Church has provided rooms where its people can meet in an environment that will not only add enjoyment to their church life but will exert an influence on the home surroundings of many.

The completed building realizes very satisfactorily the ideal of those responsible for its erection: to obtain a complete church equipment possessing the maximum of churchliness, efficiency, convenience and attractiveness in return for a minimum of investment.



HOLY GRAIL WINDOW IN PROCTER HALL, GRADUATE COLLEGE, PRINCETON UNIVERSITY

The HOLY GRAIL WINDOW IN PROCTER HALL, GRADUATE COLLEGE — PRINCETON UNIVERSITY

DESIGNED AND EXECUTED BY CHARLES J. CONNICK

By
Charles Over Cornelius

A NOTABLE contribution to American decorative art in stained glass is presented with the installation in Procter Hall at the Graduate College, Princeton University, of the series of lancet windows which fill the large bay window on the east side of the hall. The great hall itself, the finest example of secular Gothic architecture in America, is divided into seven bays by the oaken hammer-beams of the roof, marked on the exterior by simple buttresses. The arched and pointed windows in six of the bays are divided by the mullions into lancets surmounted by tracery. The sixth bay from the entrance on either side is differently treated—on the west occupied by a great fireplace and chimneybreast and on the east by the bay window which fills the whole space.

This bay window, forming three sides of a hexagon, is divided into three tiers of lancets, six lancets in each tier. Simple cusped tracery divides the lower tiers, flowering more elaborately toward the top into various geometrical divisions dominated by the large quatrefoils crowning each of the three sides. The sturdy stone mullions are simply molded and at the angles are reinforced by the slender shafts which rise to support the rib-vaulted ceiling.

The subject of the storied window is the Search for the Holy Grail as told by Sir Thomas Malory, in the "Morte d'Arthur," published in 1485. The composition divides into three parts: the first appearance of the Grail and the institution of the search, the renewal of the search by Sir Galahad and its final consummation in the appearance of the Grail to the successful knights. The first appearance of the Grail in Camelot and the beginning of the search are introduced in the lower tier, where are depicted acts of both the successful and unsuccessful searchers, scenes significant of the devoted self-sacrifice and physical prowess of the knights of the Round Table. The mystical appearance of the Grail to Galahad amongst the knights is perhaps the most noticeable feature, accompanied as it is by a great sound, a white light and a sweet savor—the first symbolized by the associated idea of lightning suggesting thunder; the second by a brilliant white ray caught up by the circle of white doves; and the third by the censers in the hands of the angels who conduct the bearer of the Cup.

Identification of the nine knights and King Arthur who appear in the window is preserved by their traditional heraldic devices and colors. Precedent has been followed, which places on the left those knights who though courageous and sincere did not continue spiritually pure to the end of the search, and on the right those who came under the immediate influence of the Holy Grail. These knights from left to right in the lowest part of the window, each associated with his heraldic device, are Sir Gareth, Sir Uwain, King Bagdemagus, Sir Gawaine, King Arthur, Sir Ector de Maris (or Sir Hector), Sir Galahad, Sir Launcelot, Sir Percival, and Sir Bors. The inscription beneath reads: "In the myddes of thys blast thenne ther Entred in to The Halle the Holy Graile couerd with whyte samyte but ther was none that myghte see hit nor Who bare hit."

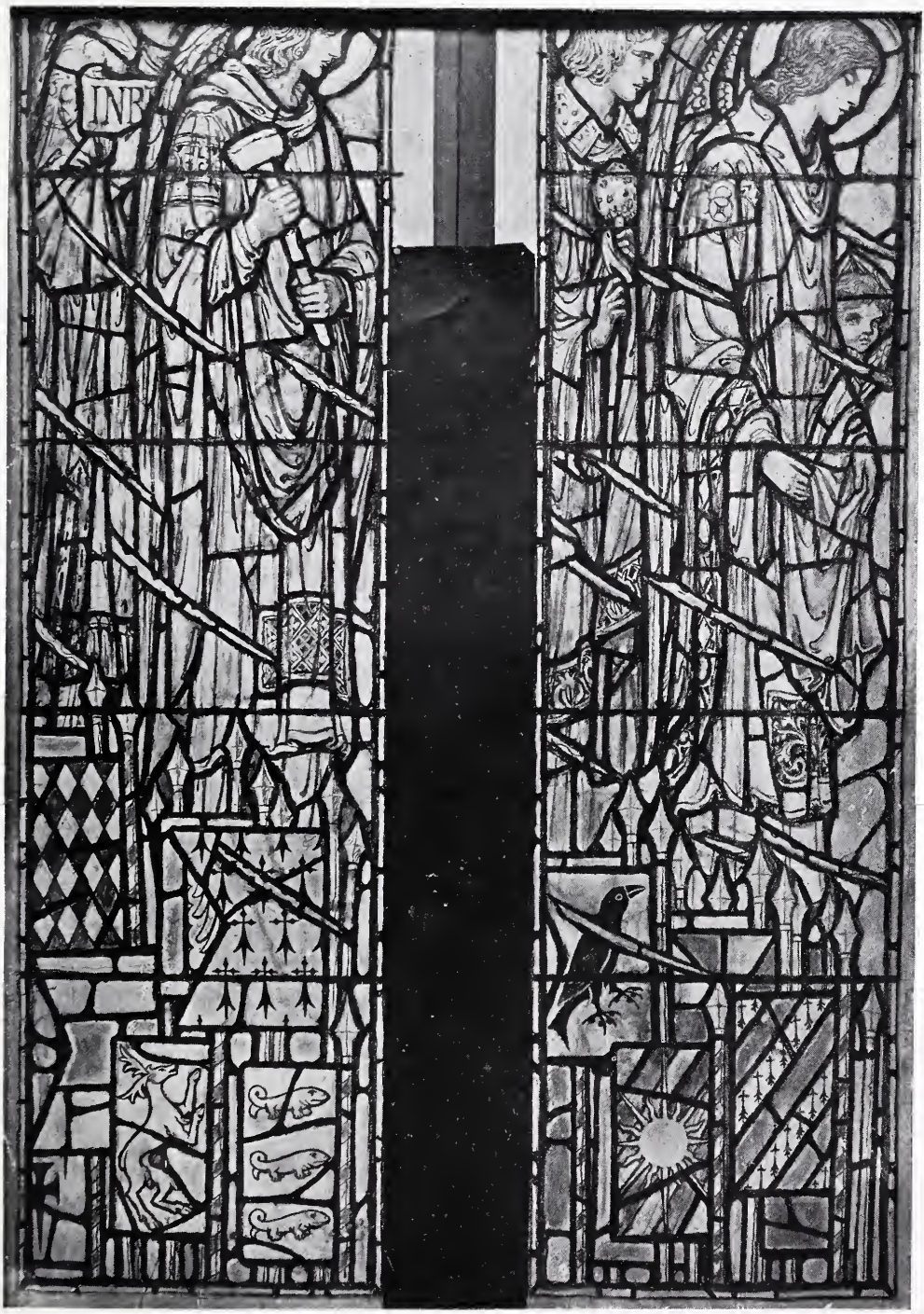
In this lower tier are also presented the small scenes of adventure in which

the knights were called upon to test their physical and moral courage. The first, an L-shaped composition on the left, which extends into the second lancet, tells of the victorious battle of Sir Gareth, Sir Uwain (first lancet), and Sir Gawain (second lancet) with the seven wicked knights, to rescue the seven maidens at the Castle of the Maidens —the seven wicked knights personifying the seven deadly sins and the seven maidens the seven goodly virtues. The inscription for this scene runs, "Syr Gareth and syr Vwayne and syr Gawaine destroye the seven wycked Bretheren of the castel of the Maydens." In the second lancet occurs the scene, above the one just described, which is summarized in the legend: "And ful actually dyd Kynge Bagdemagus yelde the whyte shelde." To the right, in the fifth and sixth lancets, are four more scenes of adventure. Sir Launcelot at the Cross of Stone, where the miracle of the atonement is revealed through the power of the Grail, is shown in the fifth lancet with the inscription, "Alle this syr Launcelot sawe and beheld to fore the Stony Crosse"; while below it is Sir Launcelot passing the lions at the perilous gate with its inscription, "Syr Launcelot passyng the lyons." In the sixth lancet Sir Bors rescues the maid from the black knight after a fierce battle at sunset: "Syr Bors rescowed the Mayde"; while in the scene immediately below Sir Percival rescues the lion cub from the evil snake: "Syr Percival rescowed the lyon."

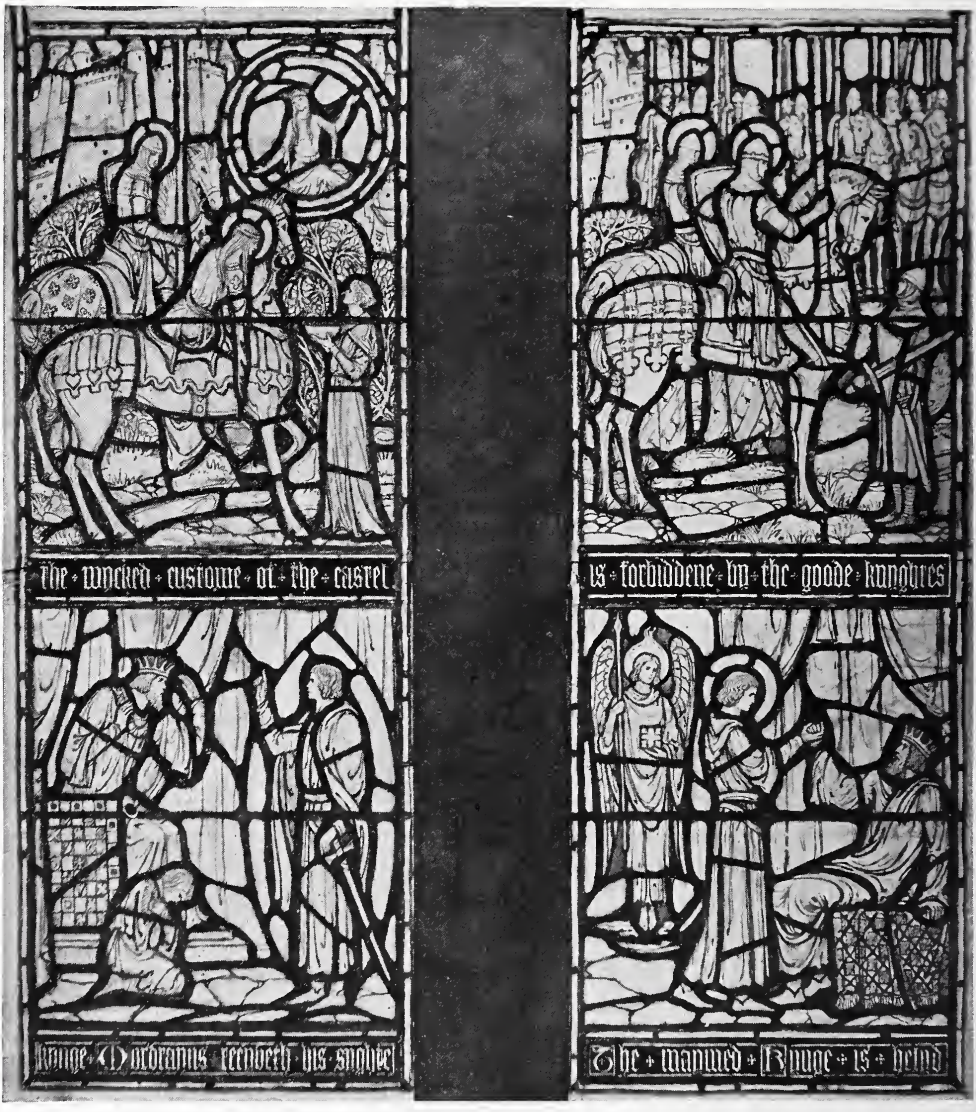
In the middle tier of lancets the composition takes up the renewal of the search for the Grail by Sir Galahad when the White Knight calls for him to renew the search and Sir Galahad bids farewell to his father at the ship in which they have voyaged together. The inscription for the first scene,"Come sayd the knyghte and starte upon this horse," is placed beneath it; while under the second stands, "Soo syr Galahad departed from hys fader." These two scenes occupy the lower base panels of the central lancets. In the upper base panels of these lancets is shown Sir Percival's vision of the White Hart and the Four Lions symbolic of Christ and the Four Evangelists and inscribed: "Thys thenne is the Holy aduysyou that syr Percyual sawe."

The subject occupying four of the upper base panels of the middle lancets is the Castle of Strange Custom, where, on the right, Sir Galahad and Sir Bors are shown confronting the black warriors, and on the left Sir Percival with his sister hear the plea for the rescue by blood sacrifice of the princess who is ill unto death in the great castle. The legend beneath this incident runs, "The good knyghtes and Percyual's syster tofore the castel of the straunge custom." The base panels to the left are symbolic; suggesting the nearness of the Sangreal, they tell of the miracles performed by its proximity. In one, "Kynge Mordrayne receyued his syghte," in another, "The maymed Kynge is helyd," and in the third the scene bears the legend, "Soo that a Cryppl was made hole by the Sancgreal," the cripple being carried by Bors and Percival. At the base of the right lancets these scenes are balanced by others symbolic of the sustaining power of the Divine Spirit in adversity and of the closeness of the bonds of friendship founded upon spiritual ideals. "The grace of the Sancgreal in pryson" presents the three knights in prison ministered to by the Holy Grail; while "Syr Galahads laste adieu" announces his departure upon the search.

In the upper parts of the central lancets the final consummation of the search for the Grail gives the opportunity for an introduction of considerable symbolic representation of the origin and legendary powers of the Holy Grail. The subject is introduced by the figures of the angel bearing the spear which pierced the side of the Lord and the figure of Joseph of Arimathea, the first bishop of Christendom, who received the Blood into the Cup. The knights are grouped to right and left, bearing banners whose staffs extend through into the upper lancets. Here the figure of Our Lord stands with uplifted arms holding the Grail and is surrounded by the seven cherubs which symbolize the seven theological virtues. Below Him are seven flying doves (the



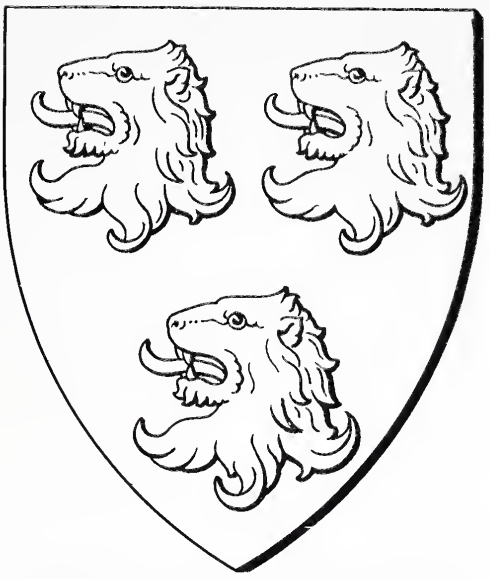
LEFT-HAND PAIR OF
LANCETS IN TOP TIER.



SCENES FROM LEFT–HAND PAIR
OF LANCETS IN SECOND TIER.



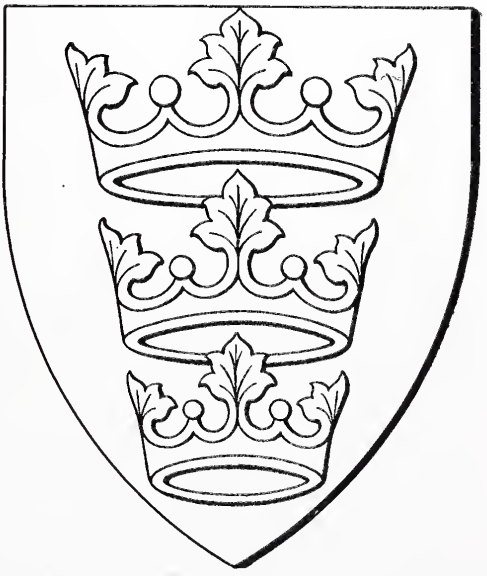
ARMS OF JOSEPH OF ARIMATHEA: BLUE FIELD, GOLD LION, RED TONGUE AND CLAWS.



ARMS OF SIR GAWAYN: BLUE FIELD, GOLD HEADS, SILVER TEETH, RED TONGUES.



ARMS OF SIR GARETH: BLUE FIELD, GOLD EAGLE, RED TONGUE AND CLAW-NAILS, RED DIAGONAL STRIPE.



ARMS OF KING ARTHUR: RED FIELD AND PALE GOLD CROWNS.

Heraldic Drawings by Pierre de Chaignon La Rose for the Holy Grail Window.

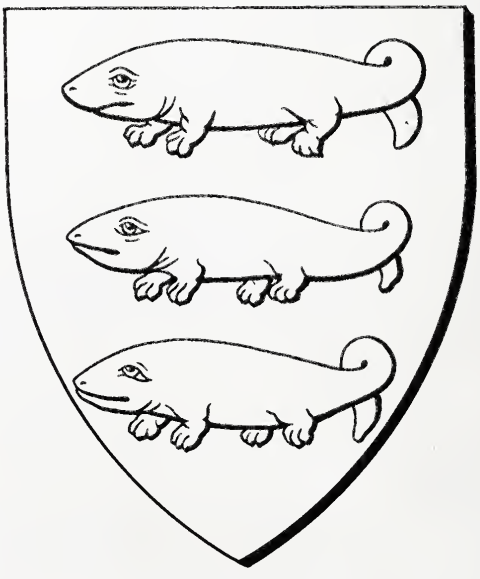
seven goodly virtues), and above Him seven haloed doves (the seven gifts of the Spirit) dart in the rays from the Grail. On either side of the main figure are angels of light with candles, and the angels bearing the instruments of the passion complete the composition.

In the crowning tracery of the window are seen cherubs and doves, which re-echo the symbolism of the virtues and spiritual gifts surrounding the figure of Christ; and in the three quatrefoils which form the important centers of this tracery are placed the coats-of-arms of Sir Galahad, Sir Bors and Sir Percival, blazoned on shields and supported by angels.

The composition is a complicated one, and its resolution into three parts has served to simplify its reading. The imposition of certain arbitrary limitations, such for instance as the division vertically into six lancets in each row, has only served to heighten the effect of a symmetrical balance. The use of much heraldry throughout has permitted of the requisite proportion of formality in the scenes and resulted in perhaps the most decorative detail which the window possesses, through the use of pure and brilliant color in well defined leading.

The color of the window, while consistent and beautiful in itself, does suffer somewhat by contrast with the great window of the Seven Liberal Studies which occupies the end wall. When these windows are seen in conjunction, the two are found to be differently keyed, and the higher key of the smaller is somewhat overpowered by the lower and stronger key of the other.

The designing and leading of the individual groups is masterly, and some of the tiny scenes have a lyric quality of purest essence; while the whole window sets a standard of the highest caliber for individual war memorials in its employment of one of the most difficult as well as one of the most beautiful mediums of artistic expression.



ARMS OF KING BAGDEMAGUS.

A.E.F. ART TRAINING CENTER
BELLEVUE, FRANCE

By Philip L. Small

EARLY in February of the present year I was called to Paris to report for duty with the Army Educational Commission. Up to my arrival in Paris I had only a vague knowledge (gained partly through a notice in *The Stars and Stripes*, partly through rumors among fellow architects at my station) of some sort of an embryonic attempt at an educational program for the soldiers of the A. E. F.

At the headquarters of the commission, 76 Rue Faubourg St. Honore, matters were still in a rather chaotic state, due to the unexpectedly early signing of the armistice and to the necessary delays of "military channels." Certain plans decided upon by the director did not harmonize with army regulations; certain officers promised by the authorities at Chaumont had failed to put in an appearance. But plans were changed, other officers substituted, and a few days in that busy suite of offices proved that, with such men as George S. Hellman, Lloyd Warren, Archibald Brown, Grosvenor Atterbury, Aymar Embury, George H. Gray, Ernest Piexotto, Lorado Taft, Solon Borglum and others, failure was impossible. Before the time appointed for the opening of the schools, order came out of chaos and the ultimate success of the project was assured. How this was accomplished it is not my purpose to relate. The details may be found in the official reports; in a booklet report of Major Geo. H. Gray, commandant of the school at Bellevue; in an article by Mr. Hellman in the New York *Times* of July 27, 1919, and other sources.

The art educational program was extensive and embraced many distinctly different phases. The College of Fine and Applied Arts of the American E. F. University at Beaune dealt chiefly with men of little or no pre-war training in art, as did also the work at Le Mans under Mr. Coxhead, at Coblenz under Mr. Plowman and in the hospitals and convalescent camps under the direction of Captain Aymar Embury and his corps of women art instructors. The Paris Atelier Section gave some two hundred men the opportunity of a rather sketchy glimpse of the methods of art instruction in Paris. But the Art Training Center at Bellevue, to which were called three hundred of the more advanced men of the A. E. F., was the acme of the entire program—a model art school near Paris.

It is of Bellevue that I wish particularly to speak.

The Pavillon de Bellevue, before the war a fashionable hotel, during the war a Red Cross hospital, is situated on the hillside overlooking the Seine, between Meudon and Sevres. This building served to house the entire staff, faculty and student body, and gave ample room for ateliers, studios and class rooms. The lecture hall and sculptors' studio were near by. Being only a short walk from Meudon, Sevres and St. Cloud, a half hour from Versailles and within easy motoring distance from Rambouillet, Dampierre, Vaux-le-Vicomte, Maisons Lafitte, St. Germain-en-Laye, Malmaison and many other places, and only twenty minutes to Paris by any of three different lines, it was ideally located for a fine arts school. In less than three hours by train the week-end sketching parties could reach Maintenon, Chartres, Orleans and the châteaux of Touraine, Fontainebleu, Etampes, Reims, Amiens, Beauvais, Rouen, Chantilly, and Pierrefonds, and on the three-day trips which were allowed each week toward the close of the term, the advanced class could reach any part of France or Belgium.

A fine arts school as a military organization would seem a rather incongruous combination; but with a commandant, himself a Beaux Arts architect, and a staff composed almost entirely of architects, the military phase of the adminis-

tration was so carefully and sympathetically handled that it turned out to be rather an advantage that we were still under military control. It introduced just the proper amount of systematic regularity that is so universally lacking in a group of art students. The only military formation was at physical drill each morning. Outside of this the only demands were regularity of attendance at classes and meals, observance of "lights out" and "taps" and compliance with regulations in all matters pertaining to reports, leaves of absence, etc. Difference of military rank among the students in the ateliers and class rooms was disregarded with a fine spirit which in no way detracted from the strictest military discipline where that discipline was necessary.

The intention of the Director, Mr. Warren, has been from the outset to make of the three months' course a cultural venture rather than a technical training. The entire program was laid out with this end in view. The time allotted to atelier work was comparatively small. The projects were short, gave opportunity for a maximum of study and a minimum of drawing, frequent criticism by eminent French architects (among whom was Victor Laloux, dean of French architects) and a presentation in sketch form. The idea was to give the student just enough of the project of the Ecole des Beaux Arts, so that he would become familiar with and appreciate the principles of planning as taught in the institution. Classes in pencil sketching and city planning completed the work in the atelier.

The study of the French language and, by means of it, French customs and manners, French thought and the trend of present-day French affairs, played an important part in the daily routine and contributed to a clearer understanding of other phases of the work more purely artistic. But perhaps the most important of all were the daily lectures attended by the entire student body.

The lectures on French political history and on French civilization were paralleled by stereopticon lectures on painting, sculpture, architecture and decoration, and interspersed with lectures on special subjects—bookbinding art, ceramics, tapestries and the like. Thus the student could see unfolding before his eyes the entire drama of French civilization and art, and bind together each period into a clear and understandable chapter. Da Vinci, Primaticcio, Le Brun, LeVau, LeNotre, Puget, Delafosse, Berain, Watteau, Richelieu, Colbert, Mazarin, Moliere, Lulli and a hundred others ceased to be names in print to him and became living actors in a drama, the setting for which was before him and about him. Their day, their passions, their pleasures, their problems and the civilization for which they wrought were revived before his eyes and he saw what art, to be vital, must mean to an age and a people.

These lectures were delivered both by members of our faculty and by many of the most eminent of French scholars, artists and art critics.

Just what were we to learn from France? Was it some formula, some tabulated knowledge that she could intentionally teach us? Or was it not something that must be absorbed slowly as the result of an affectionate and intimate contact with the finer things of the life and culture of the past, a culture as rich and splendid and well-founded as life itself? Was it not this intangible something that we inadequately label as inspiration? There is scarcely a building of any importance in France that we have not in detail and photograph in our libraries at home. Is it then that in France we can see the original? There is scarcely a picture or a piece of sculpture in the galleries that we cannot see in reproduction at home. Is it then that in France we can see the oils themselves or catch the play of light on the surface texture of the marble? Do we have to go to France to learn of LeBrun, LeVau, LeNotre, to see the examples of their work? Do we need to go to Versailles to copy a motif of the façade of the Petit Trianon to employ on that new mansion at Newport? Or to the Place de Vosges for a market square? We have the means in our library in the office.

But where else in the world can we live and breathe and sun our artistic enthusiasm amid the modern survivals of

the very atmosphere and civilization in which LeVau, LeBrun and LeNotre met and solved their problems? What they wrought was for another age, another people than ours; but in their work we should see an inspiration to do for our day and age and country what they did so well for theirs.

Not only in our lecture hall and ateliers, but in the museums, the galleries, the studios and schools of Paris, in the homes themselves, the co-operation and whole-souled generosity of the French were most gratifying and encouraging and did much to make possible the venture. For the first time in French life the mask was off, the barrier down; the foyer, the most sacred institution of French life, was open to these American sons—the foyer, the home, the heart. Our work was theirs in sympathy, and there was not a man or woman with whom we came in contact who did not open heart and mind and treasures to us, so that what we were doing, being worth while, might be done well. Private homes, museums, châteaux, private collections and ateliers, closed since 1914 and in many cases never opened to the public and therefore not to Americans, were now opened to us. Practically all of the artists' studios of Paris were opened to our painters and sculptors, that they might be given an insight into the methods, the viewpoint, the personalities of the leaders of French art.

Through Capt. Leslie Cauldwell, the Artist-Decorateur-Counseil of Paris and head of our department of interior decoration, the members of his classes were enabled to visit, with note-book and sketch-pad, private galleries, private collections, display rooms of stuffs, brasses, tapestries, furniture and art objects.

To quote from Mr. Hellman, "Not only in Paris, but throughout France, wherever our students traveled in the course of their art studies, they were welcomed by the French; and it may safely be said that no group in the American Expeditionary Forces came into happier relationship with France and its citizens than those soldier art students who entered so fully into the spirit of that immemorial land of art."

Every member of the faculty, with the exception of a few of the younger instructors, was a Paris-trained man, with a wide circle of friends among the French artists and people of prominence. It was through friends such as these that we were enabled to hear in our own atelier some very delightful musical programs, rendered by a group of Paris artistes.

Architects, painters, sculptors, decorators, staff and faculty all lived under one roof—an American roof in a foreign land. They messed together, played together, exchanged professional gossip, and for the first and perhaps the last time in their lives really appreciated the inseparable interdependence of their respective metiers. The architect had the freedom of the studios and studio-talks of the painters, sculptors and decorators; he attended critiques and lectures and exhibitions and had the opportunity of going with the painters to the Paris studios. The point of view and the problems of the painter, the sculptor, the decorator became clear to him and left an impression that will influence all future relations. Never has a body of art students been banded together in a closer bond of sympathy, unity and common purpose. It was a congenial, happy family from the commandant to the buck private. Think of the value, for example to a young man to be able to drop in for a chat, to share in a common work to a common end, to go through the same unusual experience with the older and successful men of his profession—men who had seen what he was trying to see, who had succeeded in doing what he hoped one day to do, but who did not conceal that they even envied him his experience of being (still young and impressionable) under such conditions, at such a time, in such surroundings, in this rich art-land of France.

Consider that these men had led for two years a healthy, rigorous life; were in the pink of physical condition, a sure promise of an alert and healthful mind. Consider also that they had been through an experience that had broadened and matured them; had given them a keener appreciation of the value of the life that had been spared them, a deeper, more serious affection for the finer things of

that life. It is then not hard to imagine the eagerness, the enthusiasm with which they made the most of this wonderful opportunity.

There was surprisingly little of the spirit of selfish personal ambition; a great deal of enthusiastic team-work, unity of purpose, to carry back to "God's Country," not a blind affection, but a sane clear-sighted duty and ambition to make the great opportunity count for the most in the art of the homeland.

Shortly after we entered the war and our new armies were training in preparation for the work to be done in France, there were many who expressed great hopes for the future culture of America, due to this crusade of our millions of young men into France. The hope was, I think, justifiable and was reflected in the desire of every man and woman of culture in this country. The army educational program had not yet been thought of, unless perhaps as a vague hope in the minds of such men as did finally put it through. But the elevation of this mass of young American manhood to a higher level, the education in the finer things of life, through contact with a world-old culture, was a commonly discussed topic. And comparing this Twentieth Century crusade with other great causes of art revival or intellectual impetus, we can but be optimistic.

When Charlemagne invaded Italy, he carried with him a barbarian horde; the crusaders were a mob of undisciplined and unruly religious enthusiasts; the armies of Louis XII and Francis I were a handful of professional soldiers, and yet look to history for the art changes they wrought in France.

The American Expeditionary Forces in France were composed of picked young men from all stations and walks of life, at the age when the mind and eye are most alert and impressionable: two million men in a common cause and cast together among new scenes and new surroundings—the heart of the world's culture. It was the romance of their lives. Two million men, not one of whom but will retain some spark of memory of something fine and desirable that he would one day like to see in his home or his garden or his city! Three thousand men, the artists of the flock, coming back with an undying faith in the mission of art, a knowledge and an affection for the finest and richest culture of the world and a sense of duty to the civilization and to the homeland that gave them birth, and whose artistic fate they will one day in a large measure control!

What richer harvest could we reap from the victory in which we shared?

The RURAL LIBRARY BUILDING



By

JOHN ADAMS LOWE

THE ideal library is that which stimulates its community to use print intelligently and which teaches a genuine love of books. Library service today demands of the librarian an intimate first hand knowledge of what is available in print, an understanding of the needs of the community to be served, and an ability to bring to the needs of the one the resources of the other. All of us can instance cases in small towns in which a true booklover has aroused genuine reading habits in others with only a few well selected books. The same volume carried its message and inspiration to many readers, each of whom put upon it his own interpretation. We trace character development in many such cases. No higher ideal can come to any librarian than to foster ideas and build men and women.

The librarian may be seventy-five per cent of the library and the books and the building the other twenty-five per cent, but I believe that the building may share more of real service than is often the case in small country towns. One need is to make books available and attractive. Convenience has something to do with their use. The psychology in "lure of books" and "temptation to read" needs to be employed by the building as well as by the librarian. Its very arrangement may contribute much by being convenient and understandable. People in the country do not live in marble buildings, nor are they accustomed to lofty halls, divisions of columns with carved capitals, and decorated ceilings. They are not used to furniture of one pattern everywhere, except in such institutions as they know, the meeting house, town hall, and school room. Iron shelving in aisles too narrow to permit the use of the lower ones and too high for the upper ones to be reached are not like anything they use anywhere else than at the library. They are not happy in making themselves conspicuous by climbing up a broad flight of stone steps. If the temperature at the top of a reading room is 70 degrees when it is only 42 degrees where they sit, they will not readily go to the library to read. No, if the building is to share in the making of booklovers, care must be given to details which will make it easy to bring people and books together.

To indicate what has been done in the way of library atmosphere in buildings filled with homelike qualities and yet which function completely in bringing library service to the people, I might suggest the very successful adaptation of a beautiful old court house building in Lenox, Mass., for a library building, or the church remodeled for the library at Warwick, or the Colonial cottages at Worthington and Leverett. But perhaps the library building at Hyannis, a village of Barnstable on Cape Cod, offers in some respects the best point of departure for the study of certain architectural difficulties common to recent town library buildings.

Possibly one of the unconscious drawbacks which we feel in many new buildings is the lack of the element of surprise. There is no allurement about them. You know from the many others cut from the same pattern that you will find the charging desk immediately in front of you as you enter, and that not always with the inviting hospitality which it might possess. If you seek a current magazine or the daily newspaper, you know exactly where it is to be found, and the same is true with a book.

Located on the main street of Hyannis, the old story and a half house with two ells at the rear makes an appeal which even a stranger feels. You never would mistrust it of being a library if it were

not for the sign swinging from a bracket on a tree. Simple in line, "right down in the grass," as Pennsylvanians say, covered all over with shingles unstained, but weathered the wonderful gray of old wood at the seashore, a dominating chimney expressive of the forceful winds that incessantly blow around it, two inviting projecting porches or weather vestibules, and smiling white lined window casings, it presents an example of one of the best types of an old Cape Cod house. Moreover, its color charm is enhanced by silver willows of great age towering gauntly over it, their trunks a fascinating green and silver, with scant leafage of trembling silvery bits.

And you feel the same sort of an appeal when you push in the green front door and step in. Instinctively you pause just for a moment when you first visit it, for you find no guardian sitting commandingly in front of you. No, here is a stairway which, mounting its steep way, invites you to the study and rest rooms under the gable. You look through a doorway at your left into a reception room. You feel like a late arrival, for here are groups of people in comfortable chairs, chatting, examining attractive books scattered about the tables. One women with many bundles sits by the window, her shopping done, watching for the stage to take her back home. That girl minding the baby suggests that mother is selecting books. You step through a door at your right and here you are in the old sitting room, very much as it has always been, save that the reading table in the center is a bit larger than one would expect, and that book shelves cover the walls of the room. It is quieter here than across the hall. You drop down for a minute in one of the rocking chairs by the open fireplace. And here for the first time you discover in another room the librarian, the real genius of the place, at her desk. Crowded about it are children and men and women, talking earnestly about the book each has chosen for himself. The children have their own room in an ell just back of the librarian's desk, to her left. To her right, in another ell, is a special collection room, and beyond that is the workroom. A tiny bedroom has been transformed for reference purposes, and in it one may study with almost as much privacy as in one's own sanctum.

New buildings seem to require a small lecture hall. Well, here we have one. In the reception room chairs may be set up to accommodate literary societies and any groups of people who might naturally assemble here. Before the fireplace talks may be given on local history and current events, and groups of girls and boys, members of the library reading clubs, may meet with the librarian as leader with the same informality and freedom that they do at the home of their friends. You find here bulletin boards and current events records, postcard displays and picture exhibitions, flower and bird contests records. Back of the library stretches under the trees a lawn and garden; and here the librarian plans to conduct book entertainments, receptions and teas. Visitors, new school teachers and lately arrived residents find themselves invited to this place with the cordiality of new-made friends. In such a place foreign-speaking citizens come unafraid and find an equality of citizenship which they appreciate. The machinery of a modern library system is all working here, but it never intrudes itself upon the patrons.

Whenever I visit this building I remind myself how well have been overcome some of the difficulties of securing the essential principles of library architecture. The librarian's desk completely supervises the reading-rooms. This was made possible by widening two doorways and by giving it a central position. Moreover, the library is arranged for economical administration, and the fewest possible attendants are needed. Good natural light abounds in all parts of the building, and the system of ventilation is so simple and well known that it can be operated by any one who can open a window. The shelves are placed so that a person of medium height can reach any of them. And the building will provide for a number of years of growth.

In so many new structures the heating problem becomes a serious one. Lofty ceilings and complicated heating appa-



THIS OLD HOUSE AT HYANNIS POSSESSES THE CHARM OF SURPRISE. THE TREE SIGN POINTS IT OUT AS THE TOWN LIBRARY.



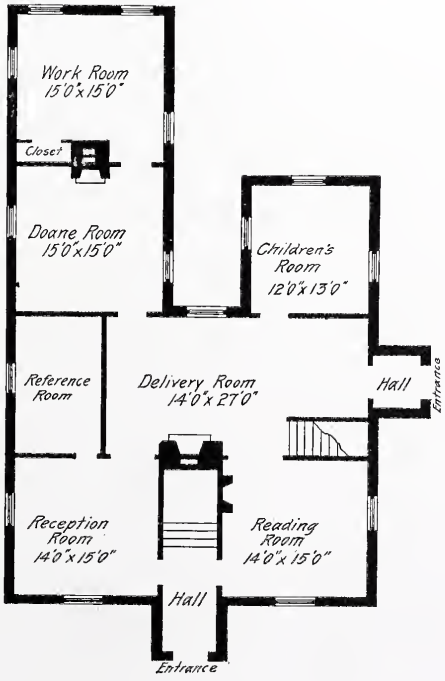
THE LIBRARIAN IS THE GENIUS OF THE PLACE, AND AT HER DESK THE FAIRY-LOVING CHILD AND THE LEARNED SAGE DISCUSS THE CHOICE OF BOOKS FROM THE SHELVES.



BOOKS MAKE THE BEST WALL DECORATION FOR LIBRARY INTERIORS. LOWER SHELVING WOULD CREATE ADDED HOMELIKE ATMOSPHERE IN THE READING ROOM.



LOOKING FROM THE FRONT ACROSS THE RECEPTION AND DELIVERY ROOMS INTO THE DOANE SPECIAL COLLECTION ROOM AND THE REFERENCE ROOM.



PLAN OF THE LIBRARY.

ratus designed for buildings in city blocks make impossible in winter many a building upon which great amounts of money have been expended. Low ceilings and stoves are familiar to the people who live in the country, and with them they are skilfully successful. Fireplaces in towns where fuel wood is abundant will disperse the chill of a late spring or early autumn day, as well as give further attractiveness to the room.

For the fault committed so repeatedly of not providing shelf room sufficient for the books in new buildings I have no mercy. Plans frequently state a total capacity all too evidently carelessly estimated. The shelving actually built is filled with the books already at hand. No future growth has been planned for. This comes about frequently, because valuable space is used for decorative panelling. Sometimes when a stack is installed, the second story is not built; and it is discovered later that the first deck is not strong enough to carry a second tier, that no space has been allowed for stairways. The result is that at great expense the whole thing has to be pulled down and built over.

Another lack in many buildings is sufficient work room for the librarian. At Hyannis the room is fifteen feet square, a baronial hall compared with many I have seen. Even in a small town library, for such purposes there should be provided a room large enough to admit comfortably a desk and a table and chairs, a closet for outside wraps, facilities for washing one's hands, and sufficient wall shelving to take care of several hundred books, those being unpacked, mended or catalogued. The light should be arranged so that the librarian may sit down and write, paste labels, mend books, and do a thousand and one things that have to be done in keeping a library going. If there is no other arrangement made for the storage of brushes, mops, and other tools used in and outside of the building, they should be provided for here. The town library does not need a "Trustees' Room," which figures on so many plans, but it does need a workroom for the real executive.

Unlimited funds are not always necessary to good library service. For years the Hyannis library association had slender funds, no town appropriation, but it begged its books from friends. Several years ago a loyal and foresighted trustee bought this old house and held it as a home for the library. At first the rent of one half of it helped support the library in the other half. When a bequest recently came to the association, with great wisdom they used part of it in remodeling the entire house for the library. It serves the fundamental purpose of a library. But in addition to this it is doing as much as a building can to perform its part of making readers and lovers of books in its community.

The PLAN OF CHICAGO

By
Robert H. Moulton

ALTHOUGH the work of putting into effect the Plan of Chicago was started only six years ago, the progress made, considering the delays occasioned by the entrance of the United States into the war, is noteworthy. Twenty-two important features of the plan are now in the workshops of the city, county, state or nation. By the time the work is completed it is estimated that $250,000,000 will have been spent, only a part of which will come—by direct taxation, at least—out of the public pocket. While the various improvements are under way for the next ten or twelve years, they will fill the city with workmen. They will create new real estate values, new business, and residence districts. Quite irrespective of general business conditions, they are a guarantee that for a long period the people of Chicago will enjoy increasing activity and prosperity.

The Plan of Chicago was inspired in the minds of a small number of men, leaders in the business life of the city and members of two of Chicago's most prominent social organizations, the Commercial Club and the Merchants' Club. This was in the period immediately following the World's Columbian exposition in 1893.

While the Commercial Club committee was working, an independent movement to the same end was started by the Merchants' Club. The plans thus advanced were entirely formulated by 1906, when the Merchants' Club formally undertook the work. In 1907 the two clubs united under the name of the Commercial Club, which, in 1908, gave the world the completed Plan of Chicago.

In producing the Plan of Chicago, the Commercial Club spared neither time, money nor effort in preparing all the charts, maps and drawings by famous architects necessary to carrying out the remodeling and development of the city. The plan was then taken to the City Hall and bestowed as a gift of the Commercial Club to the citizenship of Chicago.

The city officials accepted it and created the Chicago Plan Commission, of 328 members, with the duty of studying and promoting it. Under Charles H. Wacker, its permanent chairman, and Walter D. Moody, its managing director, that commission has been working for eight years. As a result, the city has adopted the Plan of Chicago in principle, has entered upon three basic improvements and is at the threshold of various projects of minor importance.

What might be called the heart of the entire Plan is that providing for the development of the lake front. Experts in city building have long argued that Chicago's front gate can be made the most wonderful in the world—and without cost to the taxpayers. Michigan Avenue in the last decade has developed into one of the magnificent thoroughfares of the world. But the lake has not kept pace. Chicago has a great façade, but an unkempt front lawn.

The lake front project calls for a complete remodeling of the shoreland from Jackson Park, on the south, to Wilmette, on the north, a distance of twenty-one miles. In the development of the water front park scheme there will be, beginning at Jackson Park, a yacht harbor three miles along shore and two miles across, with wooded islands. Then northward will sweep one large island park, or perhaps two islands, reaching the main harbor at Twelfth Street, nearly five miles in length and half a mile wide. Between it and the mainland will run a lagoon, fourteen hundred feet wide. Both margins of this lagoon will be planted with trees and shrubs, so arranged as to leave openings of various sizes, thus providing vistas of the water and the life upon it, to be enjoyed by the

people along the driveways or living in the homes that line the park stretches. On the lagoon, houseboats, launches, canoes, rowboats and small sailboats, as well as craft for public use, such as are usual on the Thames, the Seine, and the canals of Venice, can ply unrestricted.

The development of this water front park scheme does not end here, however. It is proposed to build a new strip of land immediately east of that occupied by the Illinois Central Railroad tracks and extending out into the water for a distance of about three hundred feet, running the entire length from Jackson Park to connect with Grant Park at Twelfth Street, paralleling the lagoon and outer parkway strip. This will give Chicago the most magnificent water front of any city in the world, and will afford the pleasures that only water sports and waterway parks can provide.

All the park authorities of Chicago have worked steadily toward the ideas of the lake front plans in the Plan of Chicago. During 1915, for instance, more than two hundred acres were added to Lincoln Park on the north. It was made by filling in the lake. This improvement embraces a yacht harbor, twenty-six hundred feet long and a thousand feet wide, a lagoon, picnic grounds, extensive playgrounds, bathing beaches and a golf course. This work cost $1,875,000, but the land thus made is estimated to be worth $15,000,000.

The improvement of Chicago's water front is the most practical and feasible part of the Plan of Chicago, and can be accomplished at practically no extra cost to the taxpayers by building at the rate of 125 acres of land a year, utilizing Chicago's waste material and filling to a maximum depth of thirty feet with the mean average depth of twelve to fifteen feet. At this rate 1,200 acres of park land can be obtained in ten years, and the value of this land, according to experts of the Chicago Real Estate Board, would be $46,000,000. Grant Park, on the water front, is an illustration of what can be accomplished. This park contains over three hundred acres and was built up entirely of the city's waste in a few years.

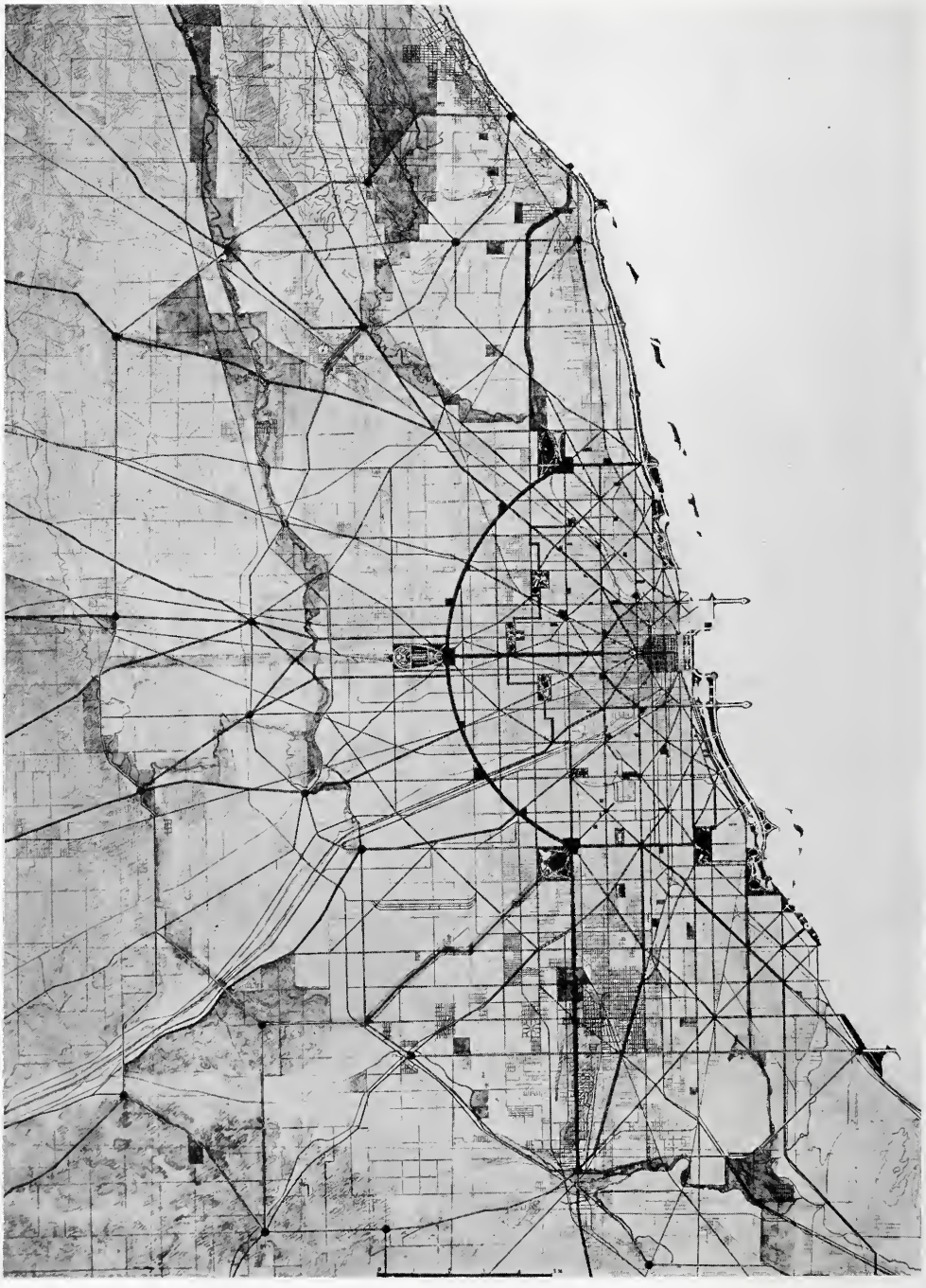
At the southern extremity of Grant Park the Field Museum of Natural History, which was made possible by gifts aggregating nine million dollars by the late Marshall Field and which is now practically completed, was the first step in the development of this space as an educational center. The building stands upon made land at the foot of Twelfth Street, facing Grant Park. It covers an area of 700 by 350 feet, or approximately two city blocks, with a floor space of 670,000 square feet. In Grant Park, near the Field Museum, are to be grouped the new Crerar Library, an institution with an endowment of four million dollars and intended for the student of social, physical, natural and applied science, and the new structures of the Art Institute. The plans for the latter show a gallery of fine arts, together with a school of art, comprising lecture halls, exhibition rooms, ateliers and general administration quarters.

One of the most spectacular features of the lake front improvement provides for the construction of a great central harbor faced by Grant Park, which is adjacent to the lake and extends along the entire business front of the city. This great basin will lie in the hollow of curving parkland shores extending into the lake three-quarters of a mile and more than a mile in length. Two long sea walls, curving outward, with openings at the center and at either end, will permit easy passage of vessels and assure calm water always within the harbor. This scheme further provides for great piers and stations at the extremity of the northern coast of the harbor, for the use of passenger carrying vessels of the lakes, and buildings for park purposes at the extremity of the southern coast of the harbor. The work of harbor improvement has already made wonderful progress, $5,000,000 having been expended upon a municipal pier of unequaled character and dignity.

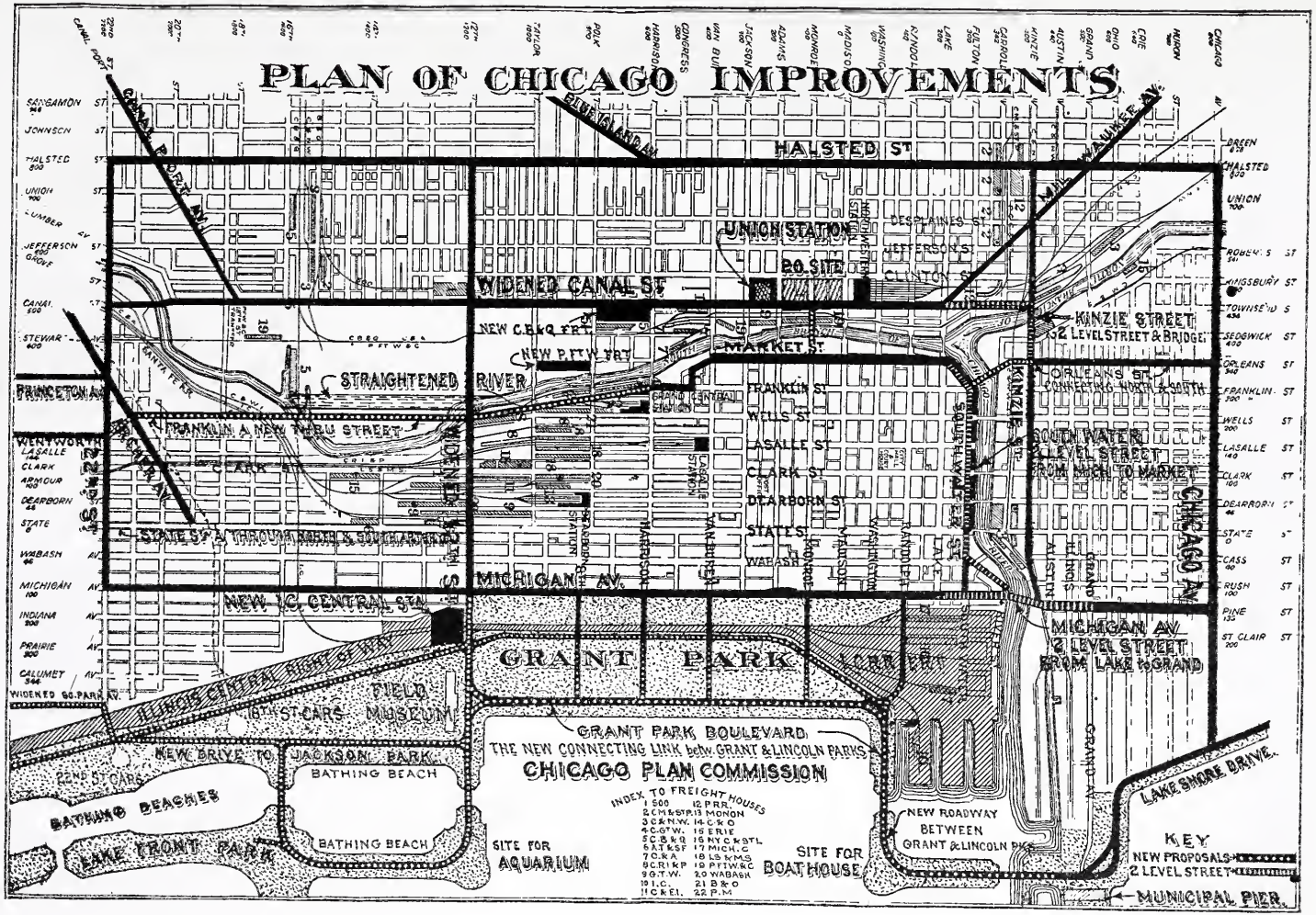
The lake front improvement involves, among other things, the electrification of the Illinois Central Railroad's right of way from a cindery smudge into a trolleyized carrier and the erection of a $50,000,000 terminal at Twelfth Street, facing north, by this road. Architecturally the new terminal will conform to



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GENERAL DIAGRAM OF EXTERIOR HIGHWAYS ENCIRCLING AND RADIATING FROM CHICAGO.



GENERAL MAP OF THE PLAN OF CHICAGO.


PLAN OF CHICAGO IMPROVEMENTS
HALSTED ST
UNION STATION
DES PLAINES ST
JEFFERSON ST
CLINTON ST
P.O. SITE
WIDENED CANAL ST
KINZIE STREET
2 LEVEL STREET & BRIDGE
NEW C.B.&Q. FRT.
NEW P.FT.W. FRT.
MARKET ST
ORLEANS ST
CONNECTING NORTH & SOUTH
STRAIGHTENED RIVER
FRANKLIN ST
WELLS ST
LASALLE ST
CLARK ST
DEARBORN ST
STATE ST
WABASH
FRANKLIN & NEW THRU STREET
STATE ST. THROUGH NORTH & SOUTH
SOUTH WATER ST
2 LEVEL STREET
FROM LAKE TO MARKET
CHICAGO AV
MICHIGAN AV.
NEW I.C. CENTRAL STA.
MICHIGAN AV
2 LEVEL STREET
FROM LAKE to GRAND
GRANT PARK
ILLINOIS CENTRAL RIGHT OF WAY
16th ST CARS
FIELD MUSEUM
NEW DRIVE TO JACKSON PARK
22ND ST CARS
BATHING BEACHES
BATHING BEACH
LAKE FRONT PARK
GRANT PARK BOULEVARD
THE NEW CONNECTING LINK betw. GRANT & LINCOLN PARKS
CHICAGO PLAN COMMISSION
INDEX TO FREIGHT HOUSES
1 500 12 PRR
2 C.M.&St.P. 13 MONON
3 C.&N.W. 14 C.&O
4 C.G.T.W. 15 ERIE
5 C.B.&Q. 16 N.Y.C.&St.L.
6 A.T.&S.F. 17 MICH.C.
7 C.R.A. 18 L.S.M.S.
8 C.R.I.&P. 19 PFT.W.&C.
9 G.T.W. 20 WABASH
10 I.C. 21 B.&O.
11 C.K.E.I. 22 P.M.
SITE FOR AQUARIUM
SITE FOR BOAT HOUSE
NEW ROADWAY BETWEEN GRANT & LINCOLN PKS.
LAKE SHORE DRIVE
KEY
NEW PROPOSALS
2 LEVEL STREET
MUNICIPAL PIER

the Field Museum, just to the east of it. The widened Twelfth Street improvement, which has already transformed for two miles the old 66-foot street into a magnificent 108-foot wide traffic-way reaching into the heart of Chicago's great West Side, is to be carried from Michigan Avenue to the new Field Museum at a heightened level; the passenger tracks in the new station will be at this level. The new station will have twenty-six tracks at the Twelfth Street level, which is a larger capacity than that of the new Union Station, under construction. Furthermore, to take care of future needs, it will be so built that its capacity can be doubled by putting in twenty-six other tracks at a future lower level whenever transportation requires it, all without disturbing traffic.

The projected station is to be large enough to handle the passenger traffic of all eastern roads not running into the Union Station. Before the war halted the project, negotiations were under way to sign up the roads now running into the smaller stations to use it. The city terminal plan now looks to three passenger terminals in Chicago, instead of the several scattered stations. This will mean three great railway stations for Chicago—the Northwestern, the Union and the Twelfth Street, and passengers will be able to pass from one to the other by way of the Twelfth Street improvement and widened Canal Street without passing into the Loop. The carrying out of this plan will not only simplify the care of passenger traffic but also the freight question and work out many of the problems of congested traffic downtown, which for years has been one of Chicago's most serious questions.

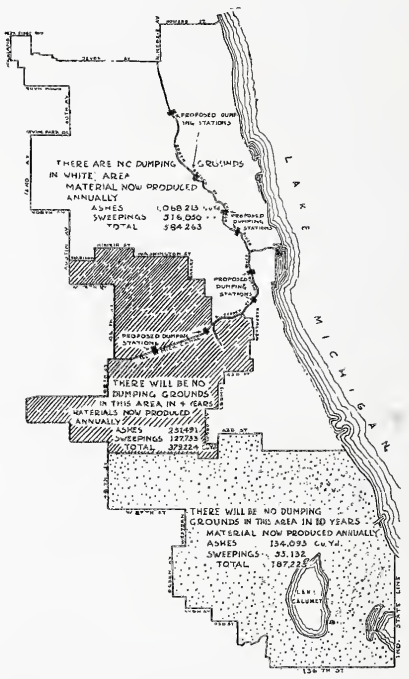
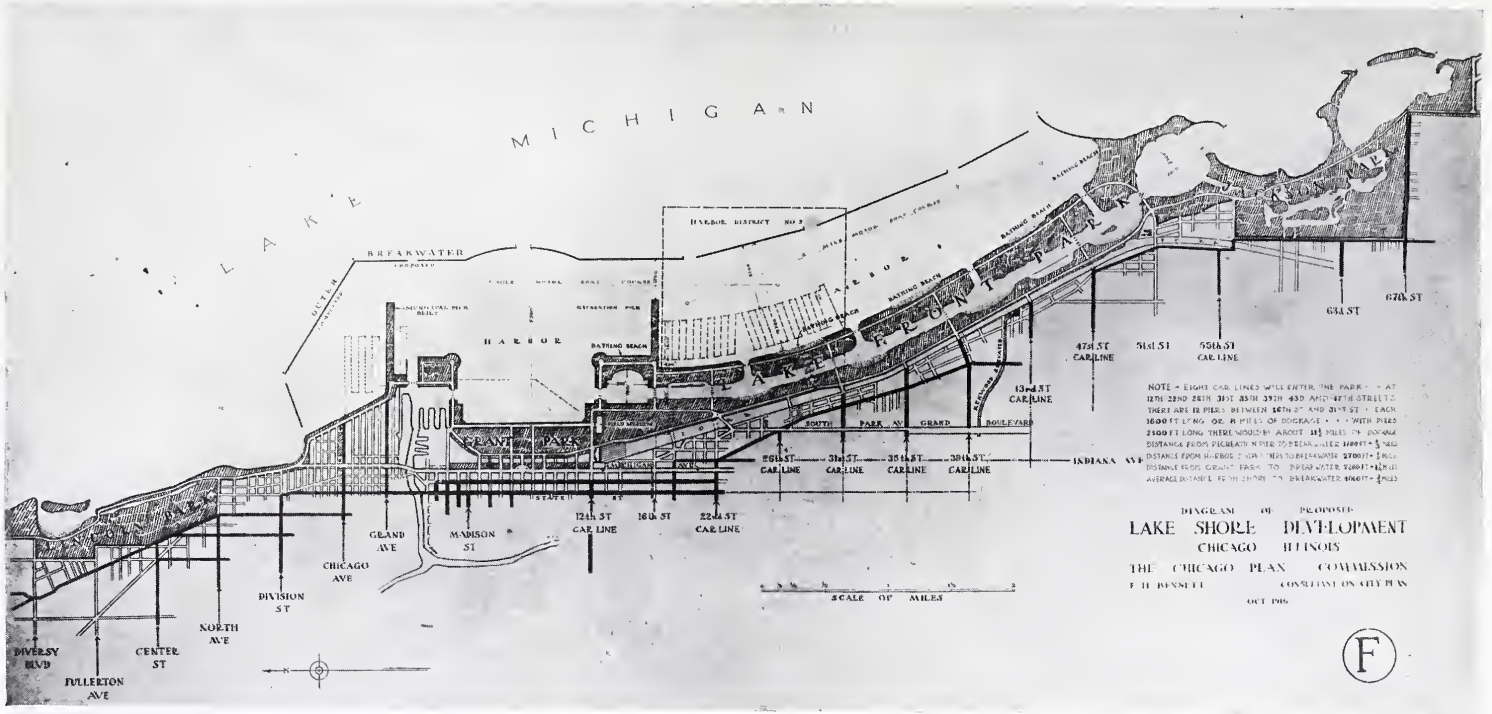


CHART SHOWING HOW 1,280 ACRES OF LAKE FRONT PARKS CAN BE MADE BY UTILIZING WASTE MATERIAL

At the north end of Grant Park begins the great Michigan Avenue Boulevard link across the river, which is now partly constructed and which will connect the South and North sides with a wide two-level street at the river crossing, the upper to be used as a boulevard and the lower as a traffic street. The necessity for the two-level plan is seen in the enormous congestion due to cross traffic, the segregation of which is of the greatest importance. There is sixteen per cent more traffic crossing the Rush Street Bridge than passes over London Bridge, long known as the world's most congested vehicle bridge. There is thirty-eight per cent more congestion on the eight connecting streets crossing Michigan Avenue between Randolph and Ohio Streets than on the eight principal points of entry into the city of London. Fifty-eight thousand vehicles of all descriptions cross or traverse Michigan Avenue between Randolph and Ohio Streets every twelve hours of a working day.

Another important reason for the projection of Michigan Avenue on the plan outlined is that this great natural highway extending, as it does, forty miles from Jackson Park to Lake Forest, skirting a great inland sea, where, in rough weather, the spray dashes over the curb, presents possibilities for attractiveness and beauty such as do not exist in any other city. The world's great cities are all inland.



REVISED PLAN FOR LAKE FRONT PARK AND HARBOR DEVELOPMENT BETWEEN GRANT AND JACKSON PARKS: 1,280 ACRES OF PARKS, A FIVE-MILE PROTECTED WATERCOURSE, NINE BATHING BEACHES, PICNIC GROUNDS, MOTOR BOAT COURSES, AND YACHT HARBOR. TAPPED BY TWELVE WEST SIDE STREET CAR LINES.



TYPE OF BRIDGE TO BE USED OVER THE LAGOON OF THE PARK ALONG THE SHORE OF LAKE MICHIGAN.



VIEW LOOKING SOUTH OVER THE LAGOON OF THE PARK TO BE BUILT ALONG THE SHORE OF LAKE MICHIGAN.

The property taken for the widening of Michigan Avenue from Randolph Street to Chicago Avenue covers nearly one mile, and embraced many expensive buildings. These have all been wrecked and removed for the widening of the street, the total amount of awards for the property taken being $5,428,671. Work has been completed from Ohio Street to Chicago Avenue and the street is paved and opened to traffic. The contracts for the balance of the improvement, including the new bridge across the Chicago River, have been let, and the work is being pushed to completion. The total amount of the contracts for all of the work is $7,686,887, which added to the amount of awards and damages makes the total cost of the whole improvement $13,115,558. However, this improvement undoubtedly will pay for itself in a few years, because all property from Randolph Street to Chicago Avenue, adjacent to the improvement, indisputably will increase in value. As a result, the city's revenue from taxation will be largely increased.

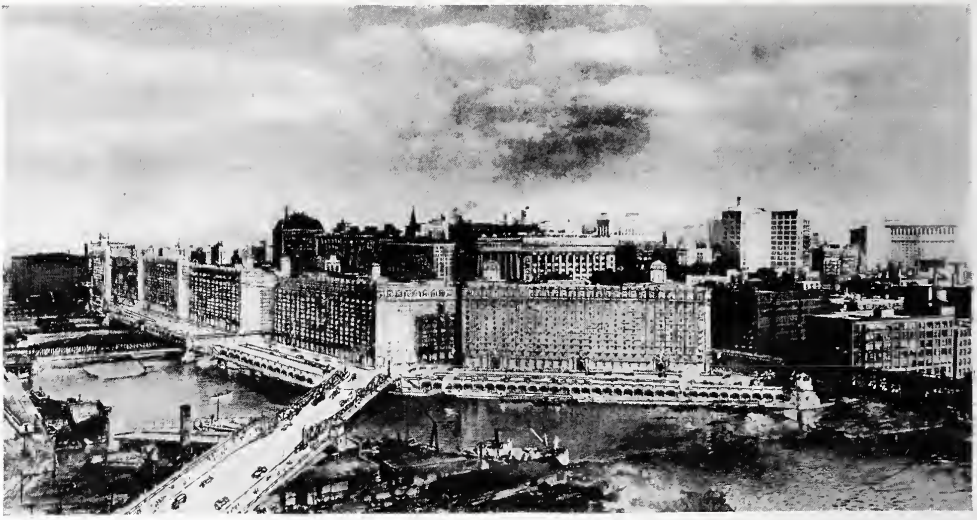
In connection with the Michigan Avenue improvement a new suburban station is to be built by the Illinois Central Railroad at Randolph Street. Suburban traffic is to enter a tunnel near Sixteenth Street and will shoot under the new Twelfth Street station, coming up to breathe again just south of Van Buren Street. As an important part of the plan there is to be a concourse at Randolph Street, under Michigan Avenue, which will take passengers out of the way of automobile traffic. Entrance to this concourse beneath this busy spot will be in front of the Public Library, which is set far enough back to give plenty of room. There will also be built at Randolph Street a new eighty-foot viaduct, to cost $1,500,000, which will replace the narrow twenty-foot structure that now gives ingress to the north end of Grant Park. It will be another great connection between Michigan Avenue and the driveway to be built at the lake edge.

The reclamation of South Water Street, the city's great produce and commission market, on which congestion is so dense that through traffic is absolutely blocked, is another improvement of magnitude, and one which is necessary to complete Chicago's great central district. As it stands today, South Water Street is a wasteful, disheartening, riotous, unnecessary survival from the town's careless, untutored youth. It is a public highway entirely absorbed by private business; and, worse than that, the private business runs over into five of the most important north and south streets in the Loop. As a produce market, South Water Street is doomed. New locations, with improved sanitary and scientific handling and interchange facilities, must be found.

When this street is reconstructed and rehabilitated according to the Chicago Plan, it will be another Michigan Avenue for half a mile. It will have what even Michigan Avenue lacks — namely, a broad strip of subway and of quays inclining to the water's edge and permitting inexpensive distribution of goods from warerooms and of heavy freight from warehouses direct into rail and water terminals; permitting, also, noble architectural treatment and the introduction of that most engaging feature of many a European city, the open air flower market of the quays.

The plans for the reconstruction of South Water Street call for the clearing away of the buildings on the north side of the street from State to Market Street, a distance of about half a mile, and for double decking it, thus providing roadways for light traffic and heavy freighting. Under this plan it will not only have all that it now lacks — air, light, view, cleanliness, spaciousness, and a definite place in a harmonized scheme of downtown development; but will become second only to Michigan Avenue as a traffic distributor by taking 15,714 vehicle trips a day out of the Loop.

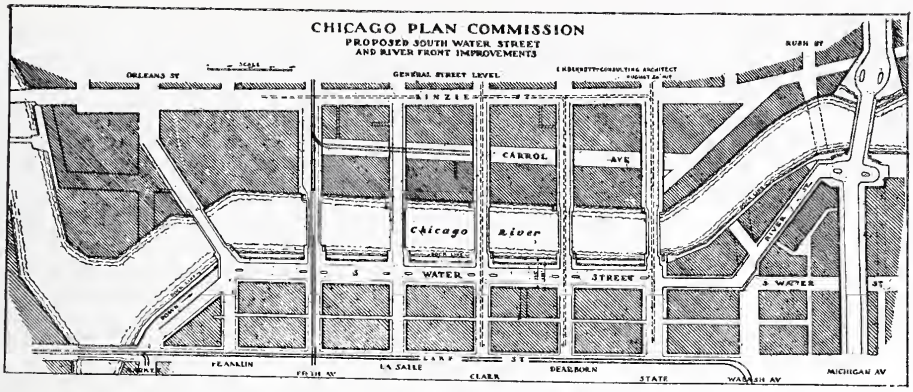
By development since 1911, the future of Canal Street as a place of monumental architecture is assured. First there came the fine $20,000,000 Northwestern Railway Terminal. Then, more recently, the splendid Union Station, forming a part of the $50,000,000 development plans of the Pennsylvania and associated lines, work on which, held up by the war, will now proceed as



PHOTOGRAPH OF EXISTING CENTRAL DISTRICT OF CHICAGO, WITH PROPOSED SOUTH WATER STREET DOUBLE-DECK IMPROVEMENTS SKETCHED IN.



SHOWING ARRANGEMENT OF STREETS AND WAYS FOR TEAMING AND RECEPTION OF FREIGHT BY BOAT, AT DIFFERENT LEVELS, ON THE CHICAGO RIVER AT LAKE MICHIGAN.

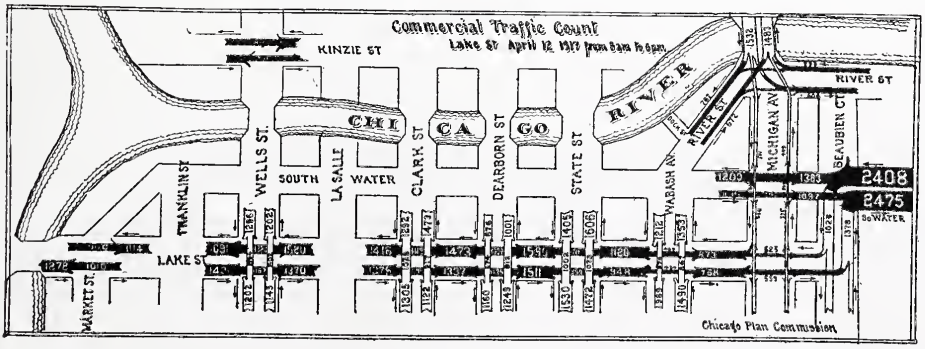


rapidly as labor and material can be obtained. Between these two imposing terminals will be located the new West Side Post Office, which will be commensurate with Chicago's position as the central clearing point for the mail of the entire country.

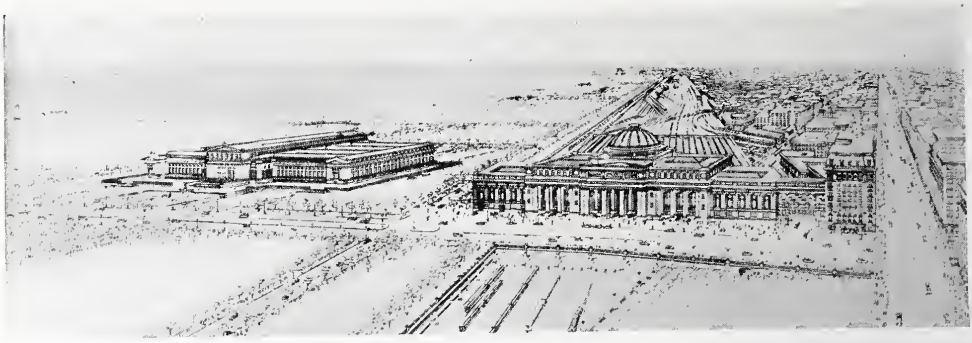
Perhaps no other feature of the Plan of Chicago will save so much money and bring so quick a return in convenience and traffic facilitation as the extension of Ogden Avenue from Union Park to Lincoln Park at North Avenue. The whole area, which the improved street will penetrate, open up and animate, is now more or less at a point of stagnation. It fits in with no ordered scheme of community activity. The reason is that the district is isolated, pocketed. From the northeast to the southwest it has no great diagonal artery—only right angle streets.

The extension of Ogden Avenue in the manner proposed will result in the creation of a big commercial artery, two and a half miles long and 108 feet wide, tapping all important east and west and north and south streets in the area it will diagonalize. It will result, further, in an appreciable easing of traffic in the Loop; will facilitate heavy transportation into and out of the Northwest Side, and will provide a quick, easy way to Lincoln Park from crowded districts of the West Side far removed from Lake Michigan. It will shorten, for instance, the distance from Union Park to Lincoln Park by one mile. More than this, it will provide a cross town thoroughfare connecting important north shore suburbs with other suburbs on the southwest.

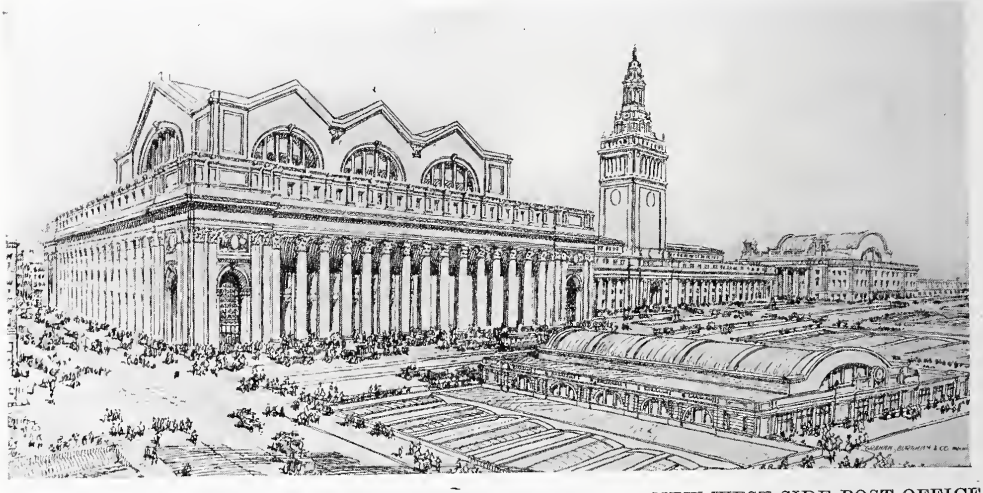
Other salient features of the Plan of Chicago include the widening of Western Avenue to one hundred feet its entire length; the improvement of Ashland Avenue and Robey Street, making them through thoroughfares; the construction of an outer drive connecting Grant and Lincoln Parks via the lake front, thus relieving downtown congestion, and making a direct connection between



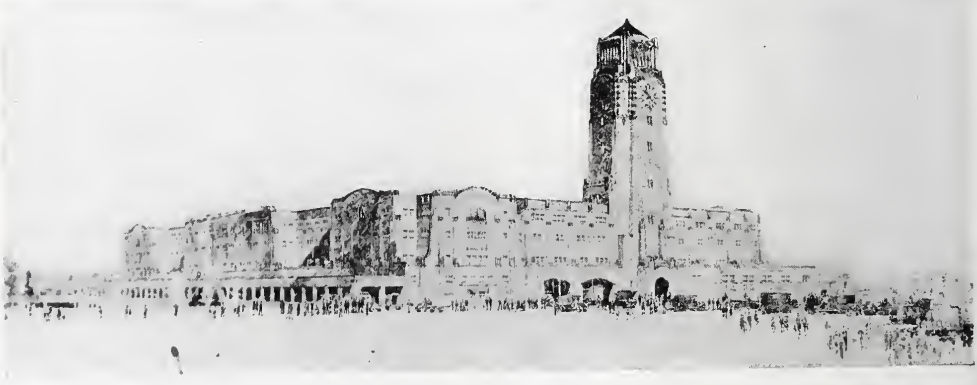
PLAN OF EXISTING SOUTH WATER STREET AND OF CHICAGO RIVER.



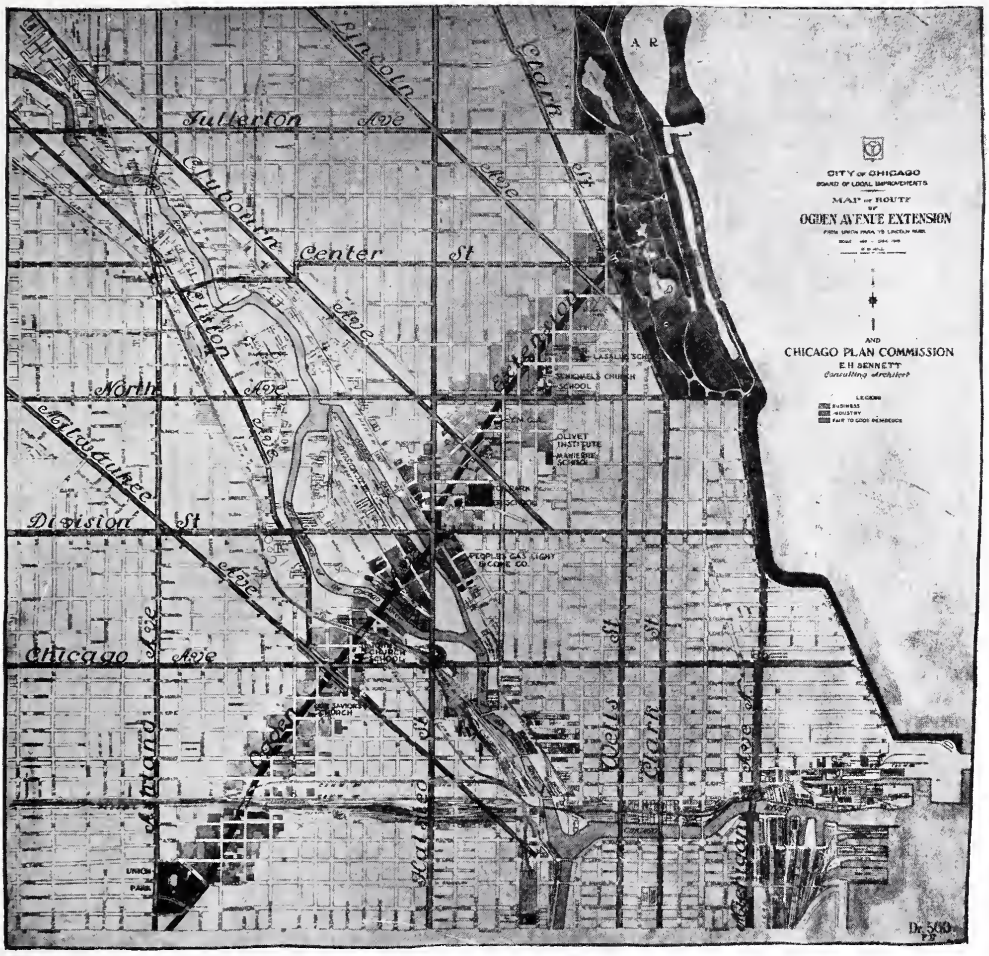
NEW ILLINOIS CENTRAL STATION AS IT WILL APPEAR ON NEW EAST TWELFTH STREET, WITH NEW FIELD MUSEUM ON THE LAKE FRONT.



NEW UNION STATION UNDER CONSTRUCTION, ON LEFT; NEW WEST SIDE POST OFFICE IN CENTER; AND NEW NORTH WESTERN STATION (COMPLETED) ON RIGHT.



NEW PENNSYLVANIA FREIGHT TERMINAL UNDER CONSTRUCTION BETWEEN POLK AND TAYLOR STREETS, CANAL STREET AND THE SOUTH BRANCH OF THE CHICAGO RIVER.



OGDEN AVENUE EXTENSION.

Jackson Park, the new lake front park, Grant Park, the Municipal Pier, and Lincoln Park; the construction of boulevards along the drainage canal to connect with the park system; the straightening of the Chicago River in a number of places and the building of new bridges across it; the opening of the Indian Boundary Road from the Desplaines River near Belmont Avenue to Crawford and Peterson Avenues and via Peterson Avenue to the lake, thus producing a great outer diagonal thoroughfare, crossing prominent section and half-section line streets, and passing many public institutions; and the acquisition of additional forest areas already selected for purchase, to be added to the more than six thousand acres so far secured in the great plan to give the people on all sides of the city playgrounds of vast worth to their health and happiness.

Since this article was written the people of Chicago, on November 4, by an overwhelming vote approved the issue of bonds to the amount of $28,600,000 for the extension of Ogden Avenue from Union Park to Lincoln Park, the widening of Western Avenue to one hundred feet for twenty-five miles, the widening and double decking of South Water Street, the straightening and widening to one hundred feet of Ashland Avenue, and the straightening of Robey Street, with subways beneath numerous railroad tracks. This is really going to be a $57,200,000 job, however, because for every dollar that is received from the bond issues another dollar is given by the property owners whose holdings are benefitted.



SCHEME ADOPTED FOR WIDENING AND EXTENDING MICHIGAN AVENUE NORTHWARD FROM RANDOLPH STREET. LOOKING NORTH FROM WASHINGTON STREET.

PORTFOLIO OF CVRRENT ARCHITECTVRE



GARDEN TERRACE — RESIDENCE OF J. WATSON WEBB, ESQ., WOODBURY, L. I. CROSS & CROSS, ARCHITECTS.



EVERGREEN GARDEN—RESIDENCE OF FREDERICK FRELINGHUYSEN, ESQ., ELBERON, N. J.
Marian C. Coffin, Landscape Architect.



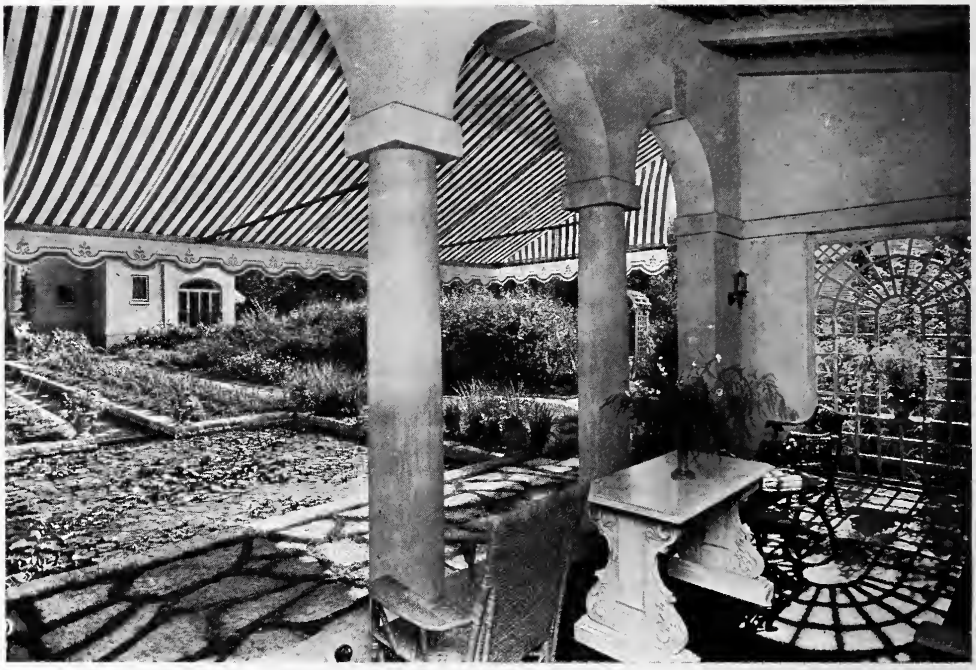
WHITE GARDEN — RESIDENCE OF FREDERICK FRELINGHUYSEN, ESQ., ELBERON, N. J.
Marian C. Coffin, Landscape Architect.



VIEW FROM TERRACE — RESIDENCE OF G. S. GAYLORD, ESQ., NEENAH, WIS.
Childs & Smith, Architects.



ENTRANCE GATE — RESIDENCE OF G. S. GAYLORD, ESQ., NEENAH, WIS.
Childs & Smith, Architects.



RESIDENCE OF E. E. BAKER, ESQ., KEWANEE, ILL.
Frederick W. Perkins, Architect.



GARDEN — RESIDENCE OF WILLIAM MARSHALL BULLITT, ESQ., OXMOOR, KENTUCKY.
Marian C. Coffin, Landscape Architect.



GARDEN — RESIDENCE OF ROBERT APPLETON, ESQ., EAST HAMPTON, L. I.
Frank Eaton Newman, Architect.



GARAGE — RESIDENCE OF WALTER B. WALKER, ESQ., ARDSLEY, N. Y.
Frank J. Forster, Architect.



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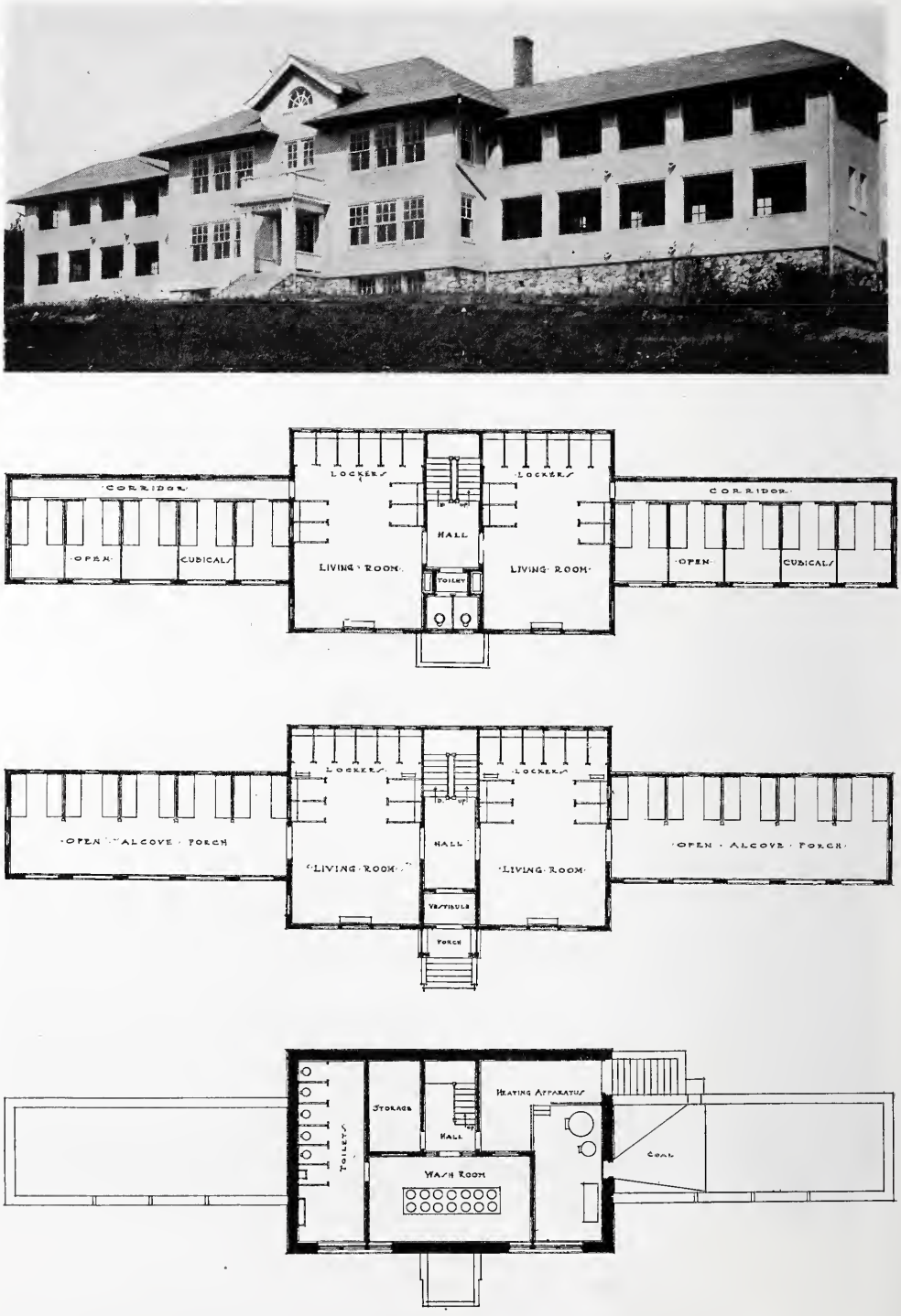
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FORTY-PATIENT PAVILION, MUNICIPAL SANITARIUM, OTISVILLE, N. Y.
J. J. Crane, Architect.

ART AND ARCHITECTURE AFTER THE WAR: A LIST OF REFERENCES

By FRANK WEITENKAMPF

THERE has been much writing and speaking about the possible influence of war on art—art in the broadest meaning of the word. A review of what has been printed may at least help to clear the air. The following list includes American, English, French and German titles. Thus, the national point of view is shown, sometimes expressed to the point of rhapsody. But the difference in personal standpoint, irrespective of nationality, also appears. Where one writer sees a far-reaching influence, a veritable renaissance of art; another finds that wars have no decisive significance at all for art.

What is perhaps more significant is that not a little of all this writing turns on the art industries—the great field of the applied and decorative arts—and on architecture. There we have to do, apparently, not so much with a direct spiritual influence of the war as with economic and social conditions furthered by the war. The vital importance of these art industries to trade is being realized abroad, and we in America should heed the preaching of those agitators in the good cause.

In architecture, one may expect some individual profit, indirectly, from the war through the opportunity which it may have given some young architects to see fine buildings abroad. But above and beyond that there is the possibility that war building activities here may at least have taught some the lesson of the advisability of better co-operation between architect, builder (contractor) and engineer. That's one of the things held in view by the Post-War Committee of the American Institute of Architects in its questionnaire.

The essential emphasis in these applications of the question, "what after the war?" to practical needs of the day and the future, lies therefore on forethought and action rather than on discussion of final causes.

The summaries of the titles which follow are not a matter of editorial selection, but of compilation. The opinions are presented without comment for the reader's choice.

ART IN GENERAL

Bell Clive. Art and war. (International Journal of Ethics, vol. 26, Oct., 1915, p. 1–10.)

"Cultivated people agree that this is no time for art . . . Art's supreme importance lies in its glory to share with truth and religion the power of appealing to that part of us which is unconditional by time or place or public or personal interests . . . There is no such thing as patriotic art . . . Rejoice that there are some who, rising above tumultuous circumstances, continue to create and speculate. . . . A nation that would defend the cause of civilization must remain civilized. . . . There have been wars as great as this; there may be greater. . . . Art survives."

Berard, L. L'Art français et la guerre. (Revue politique et littéraire, 55e annee, May 26, 1917, p. 321–325.)

"Former wars, especially those of the Empire, have been followed by an extremely brilliant period of artistic activity. Doubtless a renewal of spiritual life and artistic production will similarly follow the rough time through which we are passing. . . . The artists, after the war as before it, will follow divers ways." Author speaks also of the German invasion of the domain of art industry in France.

Binyon, Laurence. Art and the war. (New Statesman, vol. 9, May 12, 1917, p. 135–136.)

"If the senseless destruction . . . were really all, art could have little traffic with such madness. But never before in history has a war provoked among people in general . . . a desire for art to express for them the great realities of the struggle."

The author, being concerned with the representation of war in art, reviews the war drawings of Bone, Nevinson, Kennington, and Handley-Read.

Colton, W. R. Effects of war on art. [From a lecture at Carpenters' Hall.] (Architect and Contract Reporter, London, vol. 95, March 17, 1916, p. 199–201.)

"I take for the text of my discourse a quotation from Ruskin's Crown of Wild Olives: 'All the pure and noble arts of peace are founded on war.' War teaches us self-sacrifice for the good of an idea and of the community. As far as art is concerned, it was high time that war should come with its purifying firt. So-called art had grown in Europe like unto a puffed-out and unhealthy fungus of enormous size. A wave of diseased degeneracy had submerged . . . art. . . . In architecture we have perhaps kept saner, and have not fallen to the new art eccentric

ties. . . . I plead for a sane future when peace comes in art, including architecture."

Evening Post, Aug. 23, 1919. Editorial.

Deals not with art, but with the whole question of transportation of character. "The war transformed no one."

Fechter, Paul. Wege zur Kriegskunst. (Deutsche Kunst und Dekoration, Darmstadt, 19. Jahrgang, March, 1916, p. 475–478.)

"With the war there came the attempts to perpetuate, with the means of art, the prodigious event . . . a paradox, since the war aimed at invisibility. . . . This war's peculiarity lies in the fact that in the end it defies representation. . . . But, on the other hand, there is opened up a world of possibilities for the younger men. They sought, even before the war, to depart from the mere representation of the visible. . . . The war here beeomes the strongest promoter of the timely. Where one form of art finds its limits, it sets greater problems for the other, the coming, art.

Friedmann, Armin. Der Krieg und die Kunst des Kindes. (Westermann's Monatshefte, 1915, Bd. 118, p. 551–559.)

Deals with drawings made by children in the schools of Vienna, mainly representing battle seenes.

Galsworthy, John. Art and the war.' (Atlantic Monthly, Nov., 1915, p. 624–628. Also in Fortnightly Review, Nov., 1915, p. 924–929.

"For thousands of generations war has been the normal state of man's existence, yet alongside war has flourished this art, reflecting man's myriad aspirations and longings. What can this war do that a million wars have not? It is bigger and more bloody —the reaction from it will be but the greater. . . . When the war is over, the world will find that the thing which has changed least is art. . . . The wind of war reeking with death will neither have warped nor poisoned it. . . . Monsieur Sologub, the Russian poet, . . . has indicated his view that after the war art will move away from the paths of naturalism. . . . It is never good to argue about words. . . . Art will take all paths after the war just as before."

Gerrard, Thomas J. Art after the war. (Dublin Review, vol. 158, Jan., 1916, p. 51–56.)

"Among the many hopes that are to be realized through the present elash of arms is that of a new birth to art in all its forms. . . . All art is sacramental. There is an outward sign and inward beauty. . . . The experience of the battlefields will carry with it a far-reaching influenee. The enormous sacrifice of life is helping to make us appreciate more fully the reality of the spirit world. All these influenees . . . will fall on our national character and temperament, and there shall rise again a national art worthy of a great nation."

Grundy, C. Reginald. War and British art. Illus. (Connoisseur, Aug., 1915, p. 195–201.)

"Optimistic critics are looking to the war for a great renaissance in English art, an idea which probably owes its genesis to a sentence in one of Mr. George Moore's essays on *Modern Painting*. . . . This theory is fascinating. . . . But innumerable wars . . . have occurred without being followed by art. . . . All the periods of art, which Mr. Moore has mentioned, have followed on wars. . . . But they have also come during periods of great national prosperity: and, as prosperity appears to be the invariable forerunner of art, we must look on wealth rather than war as the source of art." Author cites instanccs in the past. and compares England's position in art at the time of Napoleonic wars with that which she occupies at the present. "Unfortunately, one of the economies which imposes the least self-denial on the majority is the cessation of the purehase of objects of art. But the creation and conservation of the beautiful form a vast industry on which both the present and future commercial success of the nation largely hinges. . . . Weaken and vitiate this source and the future of half the industries in the country is jeopardised. . . . Unless we are careful, there is every danger of another decline in English taste. The people who have devoted their lives to . . . art must receive adequate support, or else, as in the case of their predecessors, . . . when the war is over, a new generation [will] arise ignorant of artistic traditions. . . . Money spent in British art is not money lost to the country."

Harrison, Birge. Art and the European war. (American Magazine of Art, 1916, vol. 7, p. 270–272.)

Deals with the "all-enveloping war-atmosphere which at present overwhelms our intellectual world. . . . The psychology of war and the psychology of art are dramatically opposed to each other. . . . Monuments in commemoration of successful warfare were provided. . . when the war spirit no longer filled the air."

Hartley, C. Gasguoine, and Arthur D. Lewis. War and the arts. (English Review, 1916, vol. 23, p. 150–162.)

"Numberless wars left singularly little effect on literature and painting. . . . Untroubled art is the product of deepest faith. . . . Those who have actually seen bloodshed . . . did not wish to write stories or poems. . . . Probably the horrors of war have been better suggested by artists such as Vereshchagon, Callot, and Goya than by any writer. . . . It is the commonest error to think of art as if it stood outside the other activities of life. . . . By this war men have been brought back to the primitive emotions. . . . Art which depends on mere . . . thin cleverness will become unimportant."

Hausenstein, Wilhelm. Krieg und Kunst. (Neuezert, 1914, Jahrg. 33, Bd. 1, p. 154–160.)

"It is elear that the relation between war and art, for the period of time nearest us, that is, the 19th and 20th centuries, has had no significance in any way decisive. Still, the time in which we live impels many to attempt a review of the subject." . . . Author touches on the economic significance of the war for the artist, destruction and appropriation of art monuments and objects, the artistic value of armor, uniforms, weapons, the representation of war in art, and the question of national art.

Hendley, T. H. War in Indian art. (Journal of Indian Art, vol. 17, new series, April, 1915.) Plates.

"Object is to traee effect which war has had on artistic expression of the Indian people at different epochs." The article is concerned with the representation of war in art.

Jaumann, A. Die deutsche Kunst und der Krieg. (Deutsche Kunst und Dekoration, Jahrg. 17, 1914, Hefte 12, 21.)

"War is not favorable to the muses. . . . To the noble race war is as a purgatory. It consumes all that is over-ripe and sickly. . . . That is the soil for a new, really German art. . . . International studio tricks, devoid of time or race, no longer interest us. . . . A style will be formed, modern and Gcrman."

Kilmer, Joyce. War has stopped European letters and art, but after peace old forms will be inadequate to express new and tremendous experiences, says Arthur Bullard. (N. Y. Times Magazine, Nov. 5, 1916, p. 8.)

"The best art comes when the great experience has come and gone, and been pondered."

Kriegs-Wahrzeichen zum Benageln. 69 Entwürfe aus einem Preiswettbewerb des Deutschen Werkbundes. Munich: F. Bruckmann A. G., Dez., 1915.

"As there was danger that tokens deficient would be erected, the *Deutsche Werkbund* instituted a competition for the acquisition of sketches which were donated to the national cause."

These tokens were the portraits and other figures erected to have nails driven into them.

Lenz, Georg. Kriegsandenken der Königlichen Porzellanmanufaktur zu Berlin. Illus. (Velhagen und Klasings Monatshefte, Jahrg. 29, 1915, p. 250–262.)

Description and illustrations of souvenirs, mainly of the Napoleonic wars and the Franco-German War of 1870–71, thus illustrating influence of war in a temporary phase of art.

Oechelhaeuser, Adolf von. Krieg und Kunst: Kriegs-Vortrag. Karlsruhe 1. B.: G. Braun, 1915. 32 p. 12°.

Speaking from the standpoint of a victorious Germany, the author thinks that "new duties and problems will be so many that all force and seriousness will be needed to fulfil them . . . and that will also benefit German art."

Pazaurek, Gustav E. Patriotismus, Kunst und Kunsthandwerk. Stuttgart: Deutsche Verlags-Anstalt, 1914. 32 p. 8°. (Der deutsche Krieg, Heft 20.)

"Again a time has come when all art, in so far as it does not serve outer, blind glorification of the fatherland, is considered superfluous. . . . The rough practice of war does not provide a happy condition for the appreciation and cultivation of art. But when the cause has ceased . . . the inevitable reaction will . . . not fail to appear, and art in every form will be all the more welcome and desired."

Phillips, Duncan. Art and the war. (American Magazine of Art, vol. 9, 1918, p. 303–309.)

"Is art a luxury? . . . In war-time we are apt to think more sentimentally than clearly. . . . The conservation of art should be an important part of our war preparations . . . Art may be a refuge . . . Art is an asset for potential usefulness in time of war. . . . We need art to clarify our understanding. We . . . need pictorial propaganda. More vital . . . is the record which art can make of the emotions of this war against war. . . . The existence of art is at stake. Painters and sculptors can visualize . . . the civilization which we intend to preserve. . . . How hard hit painters are just now. Buying seems to have stopped. . . . *Is it not worth while to keep artists alive for the sake of after time?* . . . All true artists are . . . fighting for future generations. Our artists have not yet received the great reaction. . . . Yet the war is shaping and coloring their every thought. . . ."

Rothe, P. Die Kinder und der Krieg. Illus. (Deutsche Kunst und Dekoration, vol. 35, 1915, p. 455–457.)

Describes an exhibition, held in Vienna, of drawings by school children, representing war scenes.

Salmon, André. Effect on art of present war. (N. Y. Times Magazine, July 11, 1915.)

"Every war crisis puts art in grave peril, since it changes its conditions, shatters it economically and reduces for a while the number of its devotees."

Schubert, Walter F. Die deutsche Zeichenkunst und der Weltkrieg. (Westermann's Monatshefte, Jan., 1916, p. 689-699.)

Scott, Cyril. The connection of the war with art and music. (The Monthly Musical Record, London, vol. 46, Mar., 1916, p. 68–70.)

"Certain signs of a very particular nature have shown themselves in the world of art within the few years preceding the great struggle. In the domain of painting certain signs of viciousness appeared; in sculpture, very much the same thing; in music, a discordancy . . . Hardly ever has the Astral Plane been in the state it now is. . . . The spirit of the war, then, most certainly seems to have influenced with its discordant force our world of music."

Servaes, Franz. Der Krieg und der Kunstmarkt. Illus. (Deutsche Kunst und Dekoration, Jahrg. 18, 1915, p. 343–350.)

"In war time there is apparently nothing more superfluous than art. . . . To him who really loves art, it will become doubly dear in time of tribulation and distress. . . . Therefore, it is necessary that the atmosphere of artistic life in our land do not wholly die out at this time. . . . It would be a great national calamity if our art market should now be wholly deserted. In fine as well as in applied art activity must not stop. Artists must produce and art lovers must acquire."

Steinlein, Stephan. Krieg und Kunst. (Kunst und Handwerk, 1915, Jahrg. 65, p. 105–108.)

"On the one hand, war is praised as the great fructifier and liberator. . . . and all past epochs are cited in support. Others use the same historic periods to emphasize the opposite. . . . If today there is a general belief that, so to speak, out of nothing and over night . . . , a great change would take place, just because the war gave the impetus, the answer to this conception, based on romanticism rather than reality, is that, before all and as a determining factor, the matter turns on our possession of immediately active power and positive capability."

Symon, J. W. War and creative art. [Difficult position of the artist unable to go upon active service and finding no demand for his creative genius.] (English Review, Dec., 1915, p. 51–520.)

Deals with the actual practice of the arts during the war.

Villeurbanne, Jean de. La guerre et les Salons de peinture. (Nouvelle revue, April, 1915, p. 252–264.)

"The Salons will not open their doors in 1915. Therefore, it has seemed to us interesting to ask artists . . . these two questions: 1. Will not the war have a deep reaction and effect on the art of tomorrow? 2. Will it not bring about a modification in the grouping of the Societies?"

The replies, printed in this article, deal mainly with the question of Salon or no Salon.

Wuest, Paul. Möglichkeiten Künstlerischer Wahrnehmung im Kriège. (Literarhistorische Gesellscheft Bonn. Mitteilungen, 1915, Jahrg. 10, p. 27–51.)

Author describes "objectivity" with which soldier at front can observe nature, and considers it possibly a sort of reaction of the mind against all too horrible immediate impressions. . . . On the other hand, such images simply impose themselves by their inherent force."

Zeitler, Julius. Buchgewerbe und Graphik des Krieges. 3 pl. Illus. (Archir für Buchgewerbe, 1915, Bd. 52, p. 193–223.)

Review of discussion on art before and during the war, in Germany. "It is clear that the emphasis

is not so much on purging of foreign elements, as desired by reactionaries, but on an immersion in the fountain of our own radical being. . . . With our new art industry, and with architecture, our book-art shows the advantage of having already grown farthest into the great cultural problems of the future, which lie before us. The graphic arts also, so much a child of German active phantasy, will have to join this development into the spiritual, the ideal. . . . Thus do we define the result which this war in general may have for art. We now come to our subject when we consider how war itself is an object of representation in art. . . . It has been shown that direct participation in the war has great study-value, but that it cannot immediately further higher artistic production. . . . The artist who has remained at home is therefore not so different in his possibilities, from the one who has been in the field. . . . To the artists working at home war will always present itself more symbolically; they are not so much under the influence of the horrors of the moment. . . . but for the feeling which moves us all . . . they find lofty symbolism." So-called "Hurrah" illustration of the sensational, or sentimental kinds, is properly condemned, at least in its lower aspects.

ART INDUSTRIES

Armfield, Maxwell. Art and patriotism. (Colour, London, vol. 4, March, 1916, p. 55–59.)

"The formation of the Design and Industries Association . . . is a very interesting sign of the times. Imitating a German organization that . . . has been pouring gold into the trade-coffers of that country, it . . . shows that British commercial people are beginning to realize that art and patriotism, or at any rate art and money-making, are not so disunited as they once believed. . . . Is art a luxury? . . . Art is necessary to health. . . . Our economic position is largely due to the excellence of our exports. Of late years some of these have been superseded. . . . German goods, so far as soundness goes, are not a patch on our own. . . . Soundness is not the only quality demanded. Nowadays some of the sound and very solid British goods lose their attraetiveness. The transformation of Germany's commercial output . . . has been accomplished by an association of artists, producers and distributors working with one aim and with indefatigable industry and intelligence. . . . American printing and typography have for some years been far in advance of our own. . . . Whilst we have been sleeping, the Americans are learning hard. They are also discovering that taste pays. [Comparison between American and British advertisements and illustrations.] In artistic application Great Britain is at present a back number. . . . We shall be compelled to face the music. . . ."

Eisler, Max. Oesterreichisches Kunstgewerbe. Illustrated. (Dekorative Kunst, Jahrg. 18, 1915, p. 258–262.)

Describes an exhibition in the Oesterreichisehes Museum, designed to provide work for "home industry" and to incite the technical schools "in the direction of needs in cheap ware; and to bring both into fruitful relation with the thought of the great hour."

Fischel, Hartwig. Ausstellung von Kriegserinerungsartikeln. Illus. (Kunst und Kunsthandwerk, Wien, Jahrgang 18, 1915, p. 130–159.)

"The great times in which we are living make their influence felt in all fields of mental and commercial life. Artistic impulse was arrested. . . . And yet, . . . more attention might be paid to the intensive efforts of artistic, and especially art-industrial, circles to produce for home production an intensifying of its sterling quality of particularly Austrian character. If we succeed in making a virtue of the general necessity; if the moment can be utilized, at which . . . many of the foreign and bad influences are being kept at a distance, then a lasting and invaluable gain will grow from the natural drawing on and emphasizing of indigenous products."

This effort to promote home art industries resulted in the exhibition here described, controlled by a jury of experts. The fact that the exhibitors were limited to objeets suitable for war souvenirs naturally brought into view a very obvious relation between war and art, since war was the direct subject. The exhibition included glass, pottery, textiles, wood carving, leatherwork, gingerbread.

Jaumann, Anton. Die weltwirtschaftliche Rolle des Kunstgewerbes nach dem Kriege. (Innen-Dekoration, 27. Jahrgang, March, 1916, p. 101–110.)

"Preparation for peace needs no less attention than that for war. . . . One of the first necessities of peace will be to have a sufficient quantity of goods to be exchanged for foreign raw materials. And among these branches of production will be art industry."

Jessen, Peter. Deutsche Form im Kriegsjahr: Die Ausstellung in Köln, 1914 . . . München: F. Bruckmann, 1915, 2 p. l., 42 p., 1 l., 34 pl. 4°. (Deutscher Werkbund. Jahrbuch, 1915.)

An illustrated catalogue of the exhibition of the Deutsche Werkbund, which was interrupted by the war. The only reference to our topic is in the last sentence of the introduction: "May the war, the great former of eharacter, prove its purifying and forming power with us also."

Magne, H. M. La guerre et l'avenir de nos industries d'art. (Bulletin de la Société d'Encouragement pour l'Industrie Nationale, 1916, p. 532–552.)

"German competition . . . in certain industries, especially chemical industries. Certain French industries, despite the perfection of their products, found competition from German industry. The German influence gave further cause for disquietude. Not only were certain German products received in our exhibitions . . . and shops, but this sort of heavy and complicated forms . . . seemed to find imitators. Happily the evil has not become general. . . . (p. 545.) The only means of maintaining the artistic pre-eminence of a country such as ours . . . is to develop, in the artist and the artizan, by means of an appropriate training, the qualities peculiar to our raee. . . . One of our finest traditions . . . is to love art and enjoy it."

Vachon Marius. La guerre artistique avec l'Allemagne; l'organisation de la victoire. Paris: Payot et Cie., 1916, 268 pages, 12).

Prefaee: "When the great military war will be terminated by the victory of the allied nations . . . a new war will begin, the artistic, industrial and commercial war, under conditions which will make it equally terrible and implacable. The thorough preparation for this war is one of the most serious and immediate preoccupations of the Entente. . . . In this volume, I have analyzed, with all possible care, the powerful organism for teaching and propaganda for the art industries created by the Germans since 1881, and which has served them to make a breach, during thirty years, in the artistic supremacy of France. Sole object . . . has been to make known the elements of this organization . . . in order to discover what may be opportunely utilized, by an intelligent adaptation, to our needs, our ideas, and our traditions."

The chapters are as follows: 1 The artistic invasion of France by Germany from 1882 to 1914 . . . 2. The organization of art industries in Germany. . . . 3. The causes of the crisis in Freneh art industries. . . . 4. What is the museum for industrial art doing in France? . . . 5. Some other causes of the crisis in French industrial art. . . . 6. The lessons of history (XII–XVIII centuries). . . . 7. The organization of victory. (Suppression of the artistic tutelage of the state, etc.).

ARCHITECTURE

Architecture and the war. (Architect and Engineer of California, vol. 5, Oct., 1917, p. 67–68.)

A quotation from "Indian Engineering," Calcutta. "In the profession the proportion of those that have studied outside their own country has fallen greatly . . . But . . . the war has caught up the profession bodily and carried it out to fight in France, Belgium, Italy, Greece, the Balkans, Turkey, Egypt, Mesopotamia, India. Architects in great numbers have now observed some of the works of these countries. . . . Such men must return home with a greatly widened view of their profession. . . . Why do we not get beyond the eternal round of Renaissance, bastard Gothic . . . modified medieval? Because we are hide-bound by convention. . . . Those who have seen and been convinced of new possibilities in architecture may now take the lead. The truest definition of architecture is that it is an expression in form of a people's feeling."

Bragdon, Claude. Architecture and democracy. New York: A. A. Knopf, 1918.

Architecture and democracy, before, during and after the war, p. 1–73, appeared originally in the Architectural Record.

"In whatever way the war may complicate the architect's personal problem, it should . . . clarify his attitude toward his art . . . The world's arrestment of architecture (in all but its most utilitarian and ephemeral phases) is no great loss to the world for the reason that our architecture was uninspired. . . . We were under the evil spell of materialism. . . . When the storm broke militant democracy turned to the engineer, who produced buildings at record speed. . . . In one direction only, toward the general housing problem, the architectural profession has been spurred into activity by reason of the war. . . . Architects will recapture their imperiled prestige, but . . . with an altered attitude toward their art. Many must unlearn preoccupation with Gothic classic. Many must learn certain neglected lessons from the engineer." [Author cites Red Cross Community Club House at Camp Sherman as a product of the ideal relation between architect and engineer.] "Of the transvaluation of values brought about by the war, this building is an eminent example; it stands in symbolic relation to the time. . . . To the architect falls the task, in the new dispensation, of providing the appropriate material environment for its new life. Let him turn to the . . . soldiers. They will come back with ideas. . . . The future of the countries will be in their young hands. They will seek for self-expression. Because it is a spiritual thing it will find supreme expression through art. The architect who assists in weaving this garment will be supremely blessed." [In considering the effect of war on art, author discusses the increase of light and color in building and city planning.] "Thus will be born the architecture of the future; and the ornament of that architecture will tell, in a new set of symbols, the story of the rejuvenation of the world."

Gillies, John Wallace. The effect of war upon architecture. There have been two great influences in architecture, war and religion, and the former is dealt with in these paragraphs. (Arts and Decoration, May, 1919, p. 7–9, 38–47.)

"Now that we have successfully ended the greatest war of our history, with the minimum of loss and the maximum of material gain, we should be strong in national spirit and rich necessarily. A greater activity in building than we have ever known should follow during the next fifty years, if any precedent is to be depended upon. Up to this time our architecture has been peace-loving, commercial. . . .Now it is to be martial; real architecture, as it has always been. Great memorials will spring up all over the country. They will be monumental, which after all is the form real architecture should take. Let us hope that they will be in stone. . . .The cenqueror always builds unless he be a barbarian, and builds profusely. The conqueror who fought for a principle alone should build ideally. So our twentieth century should see in America the actual accomplishment of a national architecture, and the character of its structure should be martial. . . . ."

The Post-War Committee on Architectural Practice. Some comments from architects relating to questions asked by the Committee. (Architectural Forum, Boston, Vol. 31, July, 1919, p. 17–19.)

Committee appointed by American Institute of Architectects to inquire into conditions surrounding the practice of the profession. "The future of architecture is brighter than any period of its past. . . . Influence must now, however, be extended to wider fields. [The architect] must be aware of sociological questions. . . . economie conditions. We present some interesting letters on subjects contained in the Post-War circular; others will follow in the next issue." The letters deal with the relations with the contractor, the education of the public as to the functions of the architect, practical problems involved in factories, warehouses, etc.

The Evening Post had two columns on this questionnaire of the Institute, with its query "are we in right relation with the public, the building trades and crafts, and with each other. The experience of war has bared weaknesses."

An opinion on competitions by E. Swartwout. (Architectural Forum, Sept., 1919, p. 99–102.)

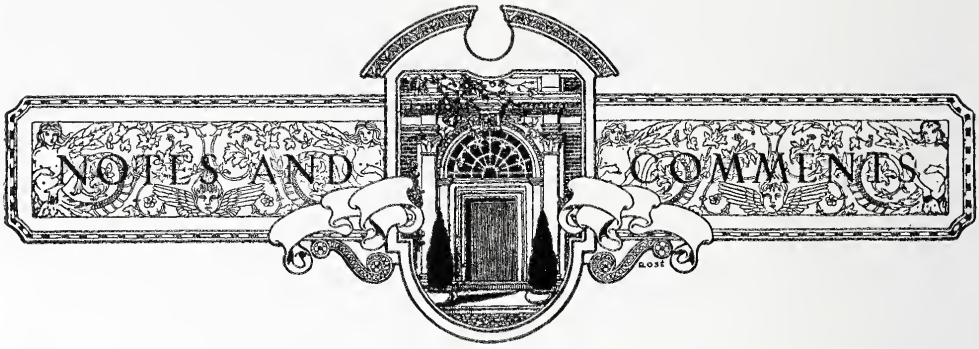
Some Canadian opinions. (Journal of the American Institute of Architects, Aug., 1919, p. 363–365.)

Post-War Committee on Architectural Practice. (Architect and Engineer of California, San Francisco, vol. 57, p. 57–61.)

Convention of American Institute of Architects . . . discussion: on status of architect. Post-War Committee statement . . . mailed to 10,000 or more architects. Extracts: Need for more comprehensive service. Modern tendency of business, accentuated by the experience of the war, is to deal with larger organizations rather than with the several contributing factors. . . . It is said that the architect has done nothing to meet this demand, but that engineers and contracting organizations have, to an extent, done se. The war has brought a situation which demands that production be increased. Experience demonstrated the great advantage of intimate organized co-operation . . . between engineers, architects and construction men. The architect is said to have neglected his relationship to labor. . . Standardization of building products . . . would simplify and cheapen the process of building."

Newell, J. P. A time for optimism. (Architect and Engineer of California, vol. 56, March, 1919.)

"The period of transition in business from war to peace is one of doubt and uncertainty. . . Into this uncertainty comes the (Portland) City Planning Commission and preposes that every property owner should set himself to considering the future of his neighborhood, studying its prospective growth in the light of its past development. As the work of city planning proceeds, the spirit of optimism will spread."



Color of Architecture in Sunshine.

Architects have yet to master the problem of color in sunshine. The failure of many of them in this regard is due, as I have hinted at various times before, to the fact that they do not take the painter's point of view. The painter's point of view is really the artist's point of view. Where color is concerned the architect must view things through the painter's eyes, or he is just so much the less artistic. He can hardly lay claim to a system of color of his own, different from the painter's, and equally valuable.

If we try to view color in architecture with the painter's eye, certain facts arrest our attention. One is that a building placed in a landscape forms a picture with the enveloping foliage, turf, rocks, etc., of which the building is only a part. All this seems evident enough; it has been referred to many times in talk and writing, yet the architect ignores it in practice. He continues to choose colors of walls and roofs, either pleasing in themselves or in combination, but without thinking of how they will be affected by the sky, the land, and, above all, by the sunlight.

Let us assume that a painter has decided to paint a picture of a building that is prominent in a landscape. His first thought is to achieve the fullest impression of unity possible. Without that single impression, he knows that he will fail in his art, no matter how perfect his drawing or rendering of different parts may be. Composition—or design—will tend to achieve this unity, and this is what architects mainly conceive of when they think of unity in a picture. But equally important, and, in regard to color, almost solely important, is the "lighting" or "effect of light," the atmosphere, the sunshine, that floods his picture. The sunshine acts in modifying, blending and harmonizing every color in it. Lighting is the great goal of modern landscape painting. The only difference between architect and painter in regard to lighting is difference in the technique of realizing it. The painter works with the brush and palette, and the architect chooses colors of materials. Yet it is curious enough that, in all the endless discussions of color in architecture, the all-essential matter of "lighting" and of "effect of light" is rarely mentioned.

The painter sits him down as I have said, and immediately strives, with all his might, to sense the effect of light in his picture. Now, as everyone knows, light and atmosphere in a landscape never remain exactly the same for many minutes at a time, yet the painter must draw some conclusions from Nature in the infinite coquetry of her moods. If he sits still and studies his subject too long, the light will change. Consequently he is apt to determine at once whether the light be "hot" or "cold," or intense or subdued, or clear or murky. If it is "cold," it does not mean always that cold colors, such as blue, purple, blue green predominate, but that the light effect is somewhat bluish or greenish or purplish. The sun is therefore a changing spotlight on Nature's outdoor stage. Objects which are actually white or gray will appear bluish or greenish-white or gray. Bright red and yellow colors will appear slightly neutralized or softened, and dark reds will take on a purplish tinge.

On the other hand, if the light is "hot," a golden or amber film of light will appear drawn over the atmosphere. Blues will appear more vibrant, often more greenish; purples, richer; greens will be touched

with gold, and the reds and yellows will blaze forth. There are no whites or grays in such a picture; they all become yellowish or slightly golden. Even the high lights on pure white clouds, the upper parts in the sky where the light turns full upon them, will need to be painted in a slightly yellow tone to hold them in the key of color of the canvas.

The painter, then, determines the quality of light in the landscape before him, as a single, full impression, and strives mightily to key all his colors to it. And the architect must do the same when he enters the landscape with his buildings, if he would have his colors successful. He must therefore learn to think of the light in his landscapes more than he has done up to this time. Hitherto he has thought of his colors as "local" colors merely. He has chosen colors of wall, roof, pilaster, cornice, window frames, shutters, simply thinking of how they will go together in themselves—perhaps in a sample room—without much regard to their effect in sunshine. Or, if he has perchance worked up an excellent color scheme in sunlight in a certain locality, he is apt to use the same scheme elsewhere, where, in a different light and landscape, it will be out of harmony. In sunshine a larger synthesis of color must be accomplished, that of keying colors to the brilliant light of the American sunshine.

The proof of these assertions will be evident if we study our American sunshine, and try to see if we cannot understand it better than we do now. Then we must study some of the prevailing schemes of color in architecture to find out how far they are united to the light in different localities of the country. The architect should consult the painter in this, for he can best give the benefit of his long training and experience in painting in many landscapes. There are, however, some observations that should occur to any keen eyed architect.

If we try to generalize, we may assert that most of the usual color combinations employed on buildings were developed, along with the architectural design, in the eastern and northern portion of the United States, largely east of the Mississippi, north of the Ohio and of the Mason and Dixon line. What may be said of the quality of sunshine in this district? A light, brilliant, hard, even disconcerting, trying in its very clearness and searching quality. Edges, details appear at a distance. The light is hardly hot or cold; rather white altogether; never very hot or very cold in the range of its shiftings. In New England is this hard light especially characteristic. There the midday sun is metallic in its glare, showing up every detail ruthlessly, without any softening edges or mellowness of form, without depth or poetry or atmosphere. Without much of what Ruskin explains as "mystery," in a splendid chapter in Modern Painters. The New England light is the most matter-of-fact, bull's-eye light that I believe may be seen in the world. This is not to say that poetry and romance are not to be found in the New England landscape. Not in the noon sun, perhaps, but on damp or misty days, and at sunrise and sunset. It has often been a delight to watch the beautiful, cool, clear blues and violets slowly steal into the hard shadows as the day ends there; to see the faint golden, yet very clear, light envelop the hills at a distance and enflame the high lights of green lawns, of tree trunks and of roads in the foreground. At this time the landscape has an atmosphere of deep, clear, almost resonant harmony. The hard, severe light of New England occurs, somewhat softened, as one goes west along the northern boundary of the country and south from New York and Philadelphia. Of course, an exception to this is the mellower light of the seashore, along the shore south of Cape Cod and Long Island.

The appropriateness of the white walls of the New England farmhouse is much explained if we understand the hard light of the north. Though not an imaginative coloring, white goes well in most landscapes, either in an atmosphere that tends to disappear, leaving colors to exist chiefly as local colors, or where there is radiance in the sunshine. Then walls become touched with faint clear, often violet shadows; or a golden or greenish light. It also adds cheerfulness to the landscape, and affords a foil for foliage and their shadows. The olden New Englander was poetic when he introduced his white architectural elements of fences, posts, gates, trellises and summer houses into his gardens, where they gleam most appropriately in dainty exquisite touches. Unfortunately, the modern architect has been somewhat less successful, especially in garden work. Design is overelaborated by too

many spotty paths and flower beds; masonry work is sombre by use of dark brick or rock, with a consequent effect of dullness. Too much detail is bad in a searching light where it is all thrust before the eye. Much more fitting are those designs where broad green-sward spaces are set off against massed flowers, long rows and hedges, with masonry walls whitewashed or white painted or stuccoed to form a foil for the planting. These flat white surfaces catch sunlight and reflect colors. The gardens of the Alcazar in Seville, Spain, are a classic example of what big, simple handling of masses of foliage and flowers against severe white walls may accomplish. The whole effect of the Alcazar might easily be transferred to America and seem quite in place here.

Another error has been made by our northern architects and landscape architects in their work. I mean their ill-thought use of color schemes imported from alien atmospheres of northern Europe. They would have done better to stick to the cautious, somewhat bald, but still rightful beginnings of the early New Englanders and New Yorkers. North Europe has no great sunlight: has in fact gloom, mist, rain. In such climate the soft dull harmonies of dark red brick, stone, purple slate and weathered timber go well together. The murky atmosphere tones over their edges and contrasts. Materials favoring play of light and shade are not greatly needed. Consequently the classic orders are never so vital as in Italy or America, for they were designed for brilliant sunshine and clear skies. Under misty conditions the dull colors of European architecture are rarely beautiful, blended, edges softened, and smoothed over by light reflected through moisture. But transferred to American sunlight, they crop out hard and cold in the north of our country and dull in the south. This is rather true of our prevailing motive of white stone and red brick. It is most difficult to bring such coloration into the key of American sunlight satisfactorily.

South of New York and Philadelphia, our hard glaring sunlight softens, not in intensity of light, but by reason of a beautiful golden radiance often increasing as one goes south. In New Jersey this radiance has a prettifying, at times almost cloying effect on the full greens and red earth of the landscape, somewhat as in Sienna, Italy. It is further south, however, that the sunlight becomes so wonderfully mellow and golden. With the luxuriousness of the vegetation, it produces landscape coloring that is warm, sensuous, vibrating. Let me quote the following:

"Here and there a negro log cabin alone disturbed the dogwood and the judas-tree, the azalea and the laurel. The tulip and the chestnut gave no sense of struggle against a stingy nature. The soft full outlines of the landscape carried no hidden horror of glaciers in its bosom. The brooding heat of the profligate vegetation, the cool charm of the running water, the terrific splendor of the June thunder-gust in the deep and solitary woods, were all sensual, animal, elemental. No European spring had shown him the same intermixture of delicate grace and passionate depravity that marked the Maryland May. He loved it too much, as if it were half Greek and half human."

This is not taken from a follower of Swinburne, nor of a modern-like Galsworthy in his most exuberant mood. It was penned by one of the coolest of the Puritans, an essential Bostonian, Henry Adams (The Education of Henry Adams, page 268). In another passage he says "the May sunshine and shadow . . . ; the thickness of the foliage and the heavy smells, the sense of atmosphere, almost new." Study these lines carefully and one will see that it is the realization by a keen mind in his first experience of the great difference between New England and southern landscape—a difference more significant than even in respect to color or light, one which should profoundly influence the inspiration of architecture in the south. "The sense of atmosphere, almost new" reveals the impression made on a young New Englander who had grown up without seeing anything but his hard, clear, native light, when he first experiences the mellow light of Maryland. Certainly Henry Adams furnishes us with a picture into which no architect can enter in any tepid mood of imported north European color schemes.

In parts of the south this golden mellowness in the air is extraordinary. In the South Carolina sand hills in full summer it was a marvel to me. An infinitely deep blue sky, often with vast steam clouds, so huge as I had never seen before, towering and piling up into the sunlight, up, up, casting vast shadows into great cliffs

and abysses of cloud. The clouds were never really white, even toward the sun, but always golden, and the golden light played down into the vast shadows. The phenomenon was so striking that even practical soldier-minds noted it, and offered explanations of it. Obviously, in such a hot effect of light, an architecture of hot colors is needed—walls yellow, of chrome or sienna or ochre tints; roofs yellow, pink, red, vermillion or claret, bright green spots, brilliant awnings. A more prosaic arrangement will probably disappoint.

In the coloring of hotter climes than England or Flanders should American architects seek their inspiration. Let them study atmospheric color in Spain and Italy. If they do they will discover that each country has a different method of coloration.

In Italy the light and color is daintier, more subtle, more evanescent, more feminine; in Spain the light and color is bolder, hotter, higher in key, more masculine. Before I went to Italy I had often remarked the landscapes in the backgrounds of the paintings of Titian, Tintoretto, Veronese, and had thought the very blue mountains and pretty, clear colors in the distance exaggerated; but it is exactly the effect one finds in the Italian landscapes, that clear, radiant "pretty" light near the horizon and in the distance. Perhaps on account of this delicate light the Italians of north Italy—where most of the great architecture is—do not attempt so much strong coloring as the Spaniards, except around Perugia and Assisi. Also they are blessed with such a picturesque and statuesque flora—stone pines and cedars—that they often prefer to use their architecture as a foil for this foliage, as I have pointed out in times past. Although there are a number of well-known villas in and near the cities which are highly developed designs in themselves, interesting architecturally without regard to their setting, the hundreds of less-known country villas are usually bare, light colored walls, pierced with a few window holes, like an old fashioned factory. But they are wonderful screens against which the foliage stands out so magnificently.

In Spain we meet with wilder and more violent conditions, more like our own in America. There is blinding yellow sunlight over broad sweeps of landscape, not many trees on the yellow and red mountains and plains, such landscapes as Zuloaga paints as the backgrounds for his pictures, as all the great Spaniards have done before him. In this light the Spaniard has preferred a decisive coloring for his buildings. He uses a rich yellow golden stone for his walls, almost as rich as any marble; yellow, vermillion and claret tiles for his roofs; bright colored accessories; brass, and strongly patterned iron work. He accents his coloring with decoration in bold relief, grouped or in strong bands, gaining the utmost possible contrast by the deep holes of the under cuttings, showing black, either in light or in the luminous shadows. Thus he meets Nature on her own terms, opposing flashing color and bold light and shade and concentrated, sparkling decoration to her flashing color in brilliant light. As a result, Spanish buildings are always keyed into the picture, indeed in the centre of things. They do not appear as intruders, drab beggars at a banquet.

Let architects think not only of the local coloring of materials, but of the light in our American landscape, and its effect on the colors of buildings. There is a revival of interest in color, over the whole art world, even in the last few years. Only twenty years ago color was somewhat neglected, and by painters, too, who avoided bright colors, preferring neutral tones. But now the new art of decoration is swiftly gaining acceptance, is even influencing commercial products, and, in the theatre especially, is exerting a profound and stirring interest. But, except for a few brilliant exceptions, architecture still lags behind, a generation behind. Let it lead and not follow.

JOHN TAYLOR BOYD, JR.

The Passing of the "House of the Tiles"

Word has just come from the City of Mexico that the famous "House of the Tiles" (Casa de los Azulejos), one of the most conspicuous and beautiful of the palatial old houses in the capital, is to be converted into a typical American drug store. This will be lamented by all lovers of the Spanish Colonial architecture that in Mexico, of all Latin countries in the New World, is found in its highest development. No other palace of the vice-regal nobility of New Spain has to this day been so perfectly preserved, both within and without, as this. It seems an everlasting

pity that this fortunate condition could not have been perpetuated. These fine old monuments have been well appreciated in Mexico; the national government seems to have been alive to the fact; under ordinary circumstances it would doubtless have taken measures to secure the preservation of the building. But just now the expense would be out of the question. Hope that eventually the government will do this seems to be encouraged by the circumstance that before the alterations for commercial uses were taken in hand, photographs of all important details were taken. Let us hope that measurements



PATIO — HOUSE OF TILES, CITY OF MEXICO. (REPRODUCED BY PERMISSION FROM "SPANISH COLONIAL ARCHITECTURE IN MEXICO," BY SYLVESTER BAXTER. BOSTON: J. B. MILLET, PUBLISHER.)



THE HOUSE OF TILES, CITY OF MEXICO. (REPRODUCED BY PERMISSION FROM "SPANISH COLONIAL ARCHITECTURE IN MEXICO," BY SYLVESTER BAXTER. BOSTON: J. B. MILLET, PUBLISHER.)

were also made and that all portions of the stonework, carvings, tiles, etc., that have had to be removed have been carefully preserved. How far this reconstruction has had to go for the new purposes does not appear. But the piso, or basement story, is uncommonly low, as may be seen by comparison with the neighboring buildings shown in the illustration. So it appears not unlikely that the basement and the story above may be thrown into one. In that event only the greatest care would avoid a painful disfigurement of the beautiful exterior with the customary show windows. Perhaps by the time this article appears the sizzling of the soda-fountain will have become a feature of what will probably be one of the busiest corners of the modern city.

The House of the Tiles has an uncommonly interesting history. It is the most notable example of Moorish influence upon Spanish Colonial architecture in America. With its brilliant surface of blue and white glazed tiles, its sparkling quality enhanced with touches of yellow, under the clear skies and intense tropical sunlight of that latitude it looks as new as if it had been built the year before, instead of standing in its present shape something like a century and a half. Just how old the house is nobody can say. But it dates well back into the sixteenth century. Don Damian Martinez was the first owner on record. Impoverished by financial misfortune, Don Damian felt obliged to sell the place at public auction. Don Diego Suárez de Pereda was the highest bidder, taking possession on December 2, 1596. In this way it became the palace of the Count of the Valley of Orizaba, one of the wealthiest and most eminent of the nobility of New Spain, as Mexico was called before its independence. In the early days of the colony a Spanish gentleman of old and eminent family, Don Rodrigo de Vivero Velasco, came to New Spain and married the widow of one of the conquerors. Their

son, who became the first bearer of the title, achieved eminence as a scholar and statesman. He was the author of a treatise on political economy and other notable works. He served as governor and captain general of the Philippines and on his return voyage was shipwrecked, perhaps on one of the richly laden galleons that used to bring splendid cargoes of precious wares from the Orient to Acapulco; to this day old Mexican families treasure heirlooms in the shape of delicate Chinese porcelain and exquisitely wrought silken fabrics dating from those times —that is, if any of them have had the fortune to escape a sacking of their houses in the period of anarchy precipitated upon Mexico.

The second Count of the Valley of Orizaba, Don Luis de Vivero, married Dona Graciana, the daughter of Don Diego Suárez de Pereda. The grand old house thus became the seniorial mansion of the family. Its aspect both without and within must have been radically different in those days. According to tradition its transformation into its present shape—or rather the shape it bore until just now—is accounted for by the following picturesque story, with its truly Spanish flavor:

The mayorazgo, as the oldest son and heir is called in Spanish, of one of the counts, was such a spendthrift that his father said to him one day, "Hijo, tu nunca haras casa de azulejos—My son, thou wilt never achieve a house of tiles."

To dwell in a "house of tiles" seems proverbially to have been a Spanish ideal, representing the luxurious living incident to the accumulation of great wealth, ever since the Moors built in that fashion their "castles in Spain."

The father's remark gave the young man pause. The idea stayed by: A house of tiles! The seed germinated in his brain and bore fruit in purpose; he turned a new leaf; changed his mode of life, worked steadfastly for his end, and with such success that when the property came into his hands he at once began to transform his ancestral home into such a palace of tiles, without and within, that nothing so elaborate and splendid in that form of adornment has ever equaled it in New Spain or anywhere else in the New World.

The tiles were of Mexican make, the product of an art developed in the city of Puebla by skilled workers brought over from Talavera in Spain by Dominican friars in the sixteenth century. Since that time Puebla has been famed for its tiles and its pottery. From Puebla have come all the beautiful tiles that so finely characterize much of the best architecture all through Central and Southern Mexico, particularly in the resplendent polychrome surfacing of the domes of the churches and convents—and probably in no other country is the dome such a universal feature.

With the exception of the ornamental stonework of light buff limestone the main part of the exterior is entirely covered with these tiles. The stonework, in color and design, effectively frames the broad surfaces of tile. The following is from the account of the house in my book, "Spanish-Colonial Architecture in Mexico":

The beautiful bronze balconies of the upper story, the altos, together with the balustrade of the patio corridor, were made in China or Japan (probably China), as was likewise the case with the similar balcony over the entrance to the house of the Count of Heras. The interior throughout, in its elegance, bears out the promise of the exterior. There is a strong flavor of the Oriental in the style—Persian as well as Moorish; the former, for example, in the peculiarly tall and slender columns of the patio.

Tiles are lavishly employed here, also; notably in the dado of the corridor and of the staircase, and bordering the exquisite fountain in the patio. In the tiling on the staircase the arms of the house are represented.

This staircase witnessed the assassination in 1828 of the last nobleman of the line, the ex-Count Don Andrés Suárez de Pereda, whose title had been extinguished with the proclamation of the republic.

It was late in the eighties, or early in the nineties, of the nineteenth century that the House of the Tiles became the home of the Jockey Club—at that time in Mexico, as typically in other Latin capitals of the world, celebrated for wealth, luxurious living, and for gambling; quite as with gilded youth and effete old age the world over. Few clubs anywhere have been more sumptuously or palatially housed. The Jockey Club, of course, went the way of all flesh during the recent period of anarchy in Mexico. The palace has since remained vacant until its conversion to commercial uses. Its lessees have secured it for a period of twenty years.

Sylvester Baxter.

THE ARCHITECTVRAL RECORD



PUBLISHED IN NEW YORK
35c A COPY $3.00 A YEAR



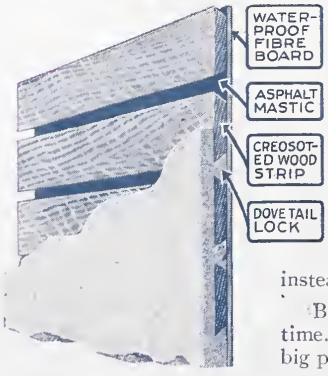
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Yearly Subscription—United States $3.00—*Foreign* $4.00—*Single copies* 35 *cents. Entered May* 22, 1902, *as Second Class Matter, at New York, N. Y. Member Audit Bureau of Circulation.*

PUBLISHED MONTHLY BY
THE ARCHITECTURAL RECORD COMPANY
115-119 WEST FORTIETH STREET, NEW YORK
F. T. MILLER, Pres. W. D. HADSELL, Vice-Pres. J. W. FRANK, Sec'y-Treas. E. S. DODGE, Vice-Pres



MANTELPIECE IN LIVING ROOM—RESIDENCE OF
J. HARLESTON PARKER, ARCHITECT, BOSTON, MASS.

THE
ARCHITECTVRAL
RECORD

VOLVME XLVI NVMBER VI

DECEMBER, 1919

The RESIDENCE of J. HARLESTON PARKER, Esq. BOSTON, MASS. OF THE FIRM OF PARKER, THOMAS & RICE, ARCHITECTS

By

Frank Chouteau Brown

THE special points of interest in this city house are to be summarized in the following particulars: first, the dwelling is an alteration — not a new house — though few might suspect that fact from any details now apparent in the structure; second, it is the house built by an architect for himself; third, its interest—and difficulty—is greatly increased by the fact that Mr. Parker possessed a large amount of family furniture, pictures and *objets d' art* which had all to be considered and permanently accommodated in his new home. Finally, there was the "mystery of the purple glass," a mere detail in the house, that, because of a peculiarly local and native Boston tradition, has happened rather to overshadow other elements far more important in the design and success of the building; and the story of the purple glass should be told first—if told at all—in order to supply the proper "local color" and clear the way for more informing and important matter to follow.

About two springs ago, shortly after we finally went into the war, the generally unruffled equanimity of Boston's most exclusive section, the so-called "Back Bay," was disturbed by a persistent and pervasive rumor that would not down, but continued to intrude at the most exclusive dinner tables—once the latest news from the Front from that evening's *Transcript* (all of two days old,

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and therefore hopefully considered as less likely to be contradicted in next morning's *Post*) had been paraded and dissected unto the third course.

The rumor was to the effect that a most disturbing and unprecedented phenomenon had been noted on Commonwealth Avenue, nearly across from the marble façade of the Hotel Vendome. It was there that, in a new house rising on the Avenue, certain windows had been seen glazed with the glass that had theretofore been considered the exclusive prerogative and birthright of Beacon Hill—and only the smallest and most exclusive portion of Beacon Hill at that. It was most certainly not, in the natural order of established things in Boston, to be encountered on Commonwealth Avenue. Even on the Hill the buildings that could boast of "purple glass" in their windows were few and far between, dating mostly from the farther side of 1840. It was inconceivable—not to say indecent—that any new "front" on the Avenue should have presumed to encroach upon so cherished a local tradition. The rumor was investigated, and denied; it was declared to be impossible. Some there were who acknowledged that, in certain lights, there was an effect that gave a possible tincture of color to the rumor; but the mere fact that it had never happened before was ample evidence to most hearers: that, of course, was sufficient to settle it—for Boston.

Nevertheless, the story would not down; it bobbed up again and again; and then at last the mischief was done: the beans *were* spilled—and in public, too—for some one wrote to the *Evening Transcript* asking for information (there were those who claimed it a clear case of *lèse-majesté* on the part of the editor who allowed the letter to appear in print). Someone else replied, claiming these windows were only to be found in the houses of the oldest and "bluest" blood in the Colony; another, writing under the well-known pen name of "Politicus," discoursed learnedly on old Boston's ancestry, the history of the Hill, changes on the Common, the effect of Christmas eve candles behind Beacon Street window panes (the nearest he ever got to his subject, by the way), finally ending by saying his grandfather had told him that only possessors of the oldest and finest wine cellars were entitled to display the symbol—whose meaning was known to the elect—adding it had been of great assistance to the young bloods of several generations ago in laying out the uncharted route of their New Year's Day calls. This was followed by another letter, in the "Notes and Queries" columns, telling how the glass had originally been imported, and some panes set in the windows of a popular coffee house of the day in Spring Lane, where the enriching (color) qualities added to port and sherries seen through the light admitted by such windows was not to be gainsaid. And so the glass came into demand among its habitués, who desired to sip their sherry with the *adumbra* of color thus gained, but without the extra charge added for that privilege by the canny Yankee innkeeper—thus the shipment was soon depleted in order to reset their dining room and parlor windows with this marvellous glass.

Finally, the editor of the above department, causing search to be made, found that the whole subject of purple, or more strictly "violet" glass, had been investigated and published in his columns some fifteen or so years before, and so the facts about the whole matter were reprinted to the following effect: The glass was imported from abroad, some authorities say from France, and upon its arrival was perfectly colorless. After being set and exposed to the sun it began to turn violet, causing much discussion and so much dissatisfaction that people refused to buy any more of it. It has been found that that portion of the panes covered by the putty is still colorless after many years, thereby proving the discoloration was caused by the action of the sun's rays.

Thomas Gaffield, the best known authority of his day on glass and its manufacture, made extensive experiments with various glasses and the effect of sun upon them. He gave an address before the Chemical Section of the American Association for the Advancement of Science in Boston on August 27, 1880,



THE RESIDENCE OF J. HARLESTON PARKER, ARCHITECT, BOSTON, MASS.



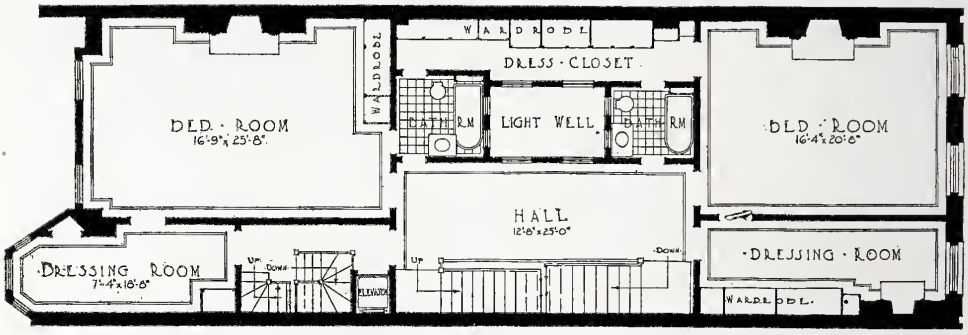
ENTRANCE—RESIDENCE OF J. HARLESTON PARKER. ARCHITECT, BOSTON, MASS.

in which he refers to the Boston purple glass, saying that although originally clear, the change to the violet tone was due to the action of the sunlight and caused by an excess of oxide of manganese used in its manufacture. As soon as this mistake was discovered by the makers it was corrected; therefore only a limited amount of this glass was manufactured and sold. Today it is of course practically unobtainable, except where found in one of the old buildings of that period.

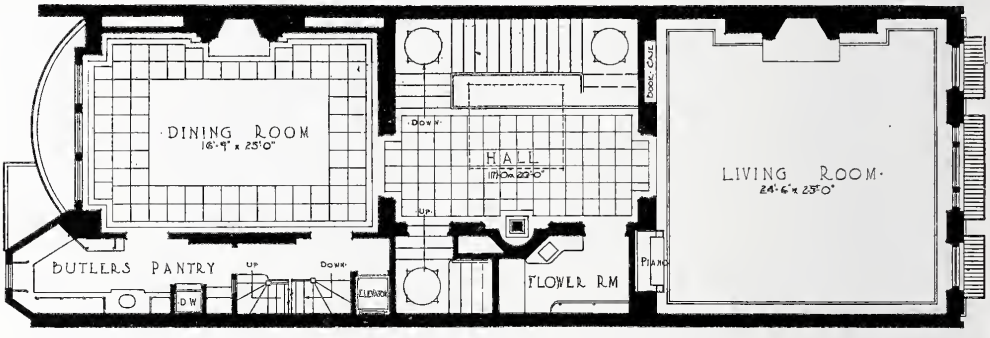
This seemed authoritatively to clear up the mystery of the original glass, but still did not explain its sudden and unexpected reappearance in the year of our Lord 1917. Hence the true and only explanation of the mystery now appears for the first time in print. It was merely this—at about the beginning of Mr. Parker's alteration, the old houses at Beacon and Somerset Streets, formerly used by the Boston City Club, had certain repairs and alterations made in them, giving Mr. Parker an opportunity to purchase the old sash, glass and all, and use the latter in his home. Investigation disclosed that the houses from which it had been removed had been built by David Sears in 1837 to 1838, and—minus the glass, and a mantel and hob grate also purchased and transferred to Mr. Parker's smoking room at the same



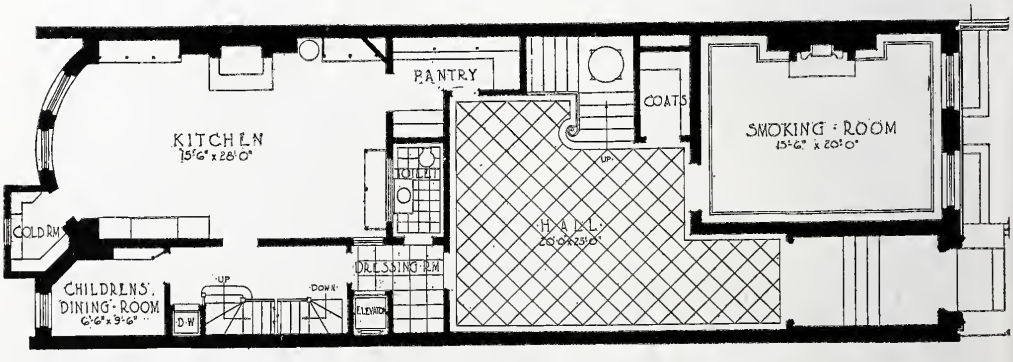
DETAIL OF FAÇADE—RESIDENCE OF J. HARLESTON PARKER, ARCHITECT, BOSTON, MASS.



THIRD FLOOR PLAN



SECOND FLOOR PLAN



FIRST FLOOR PLAN

THE RESIDENCE OF J. HARLESTON PARKER, ARCHITECT, BOSTON, MASS.

time—they are still to be seen at the upper corner of these streets in the City of Boston. This makes the glass that has caused all this discussion, undoubtedly, about eighty years old.

Having, it is hoped, now succeeded in disposing of this rumor we can turn to the equally interesting—if quite different—story of the house itself, and relate some details of its present transformation from an old—and somewhat ugly—type of Bostonian Back Bay respectability to a more modern, beautiful and, I trust we may still say, eminently respectable example of what the development of Boston's Back Bay might have been, provided only that the ill-considered restrictions in regard to "bay windows" arbitrarily established by the original owners of all the property in this section of Boston had never been invented or applied. So great was Mr. Parker's own antipathy to this hoary local precedent that he pulled down the entire façade of the old house, largely to get rid of this incumbrance; and that he has proved his belief by the result is amply evidenced by a comparison of the new front with the old houses still standing on each side of it.

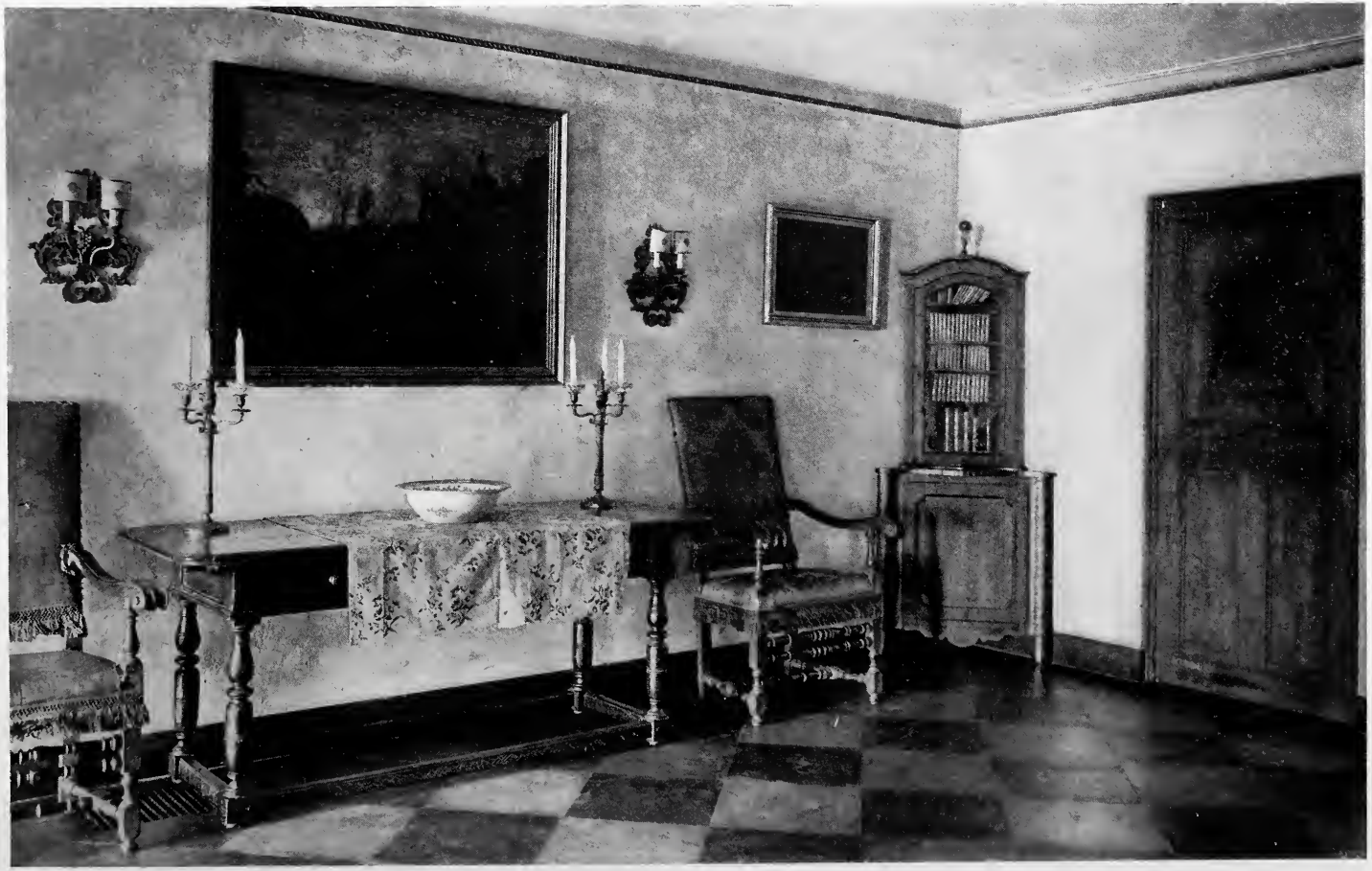
Two other factors also influenced Mr. Parker in his purchase of this property, and these were factors of plan and story height. The plan — with some merely minor modifications — he regarded as nearly right; while the height and, even more, the location of the various floor levels relative to themselves and to the street were such that he believed it possible to adapt them, with comparative inexpense, to his requirements and needs. And so the event has proved. Even the old baths and their plumbing were accepted by Mr. Parker, and, with the heating, utilized without any drastic change. The service portion, the bedrooms, the rear, were all made use of with only slight redecoration, repainting of walls and woodwork, and refinishing of floors, some occasional new closet fitments and mantels being added to give the character requisite to the furniture and draperies that were to be installed.

The front, as has already been indicated, is almost entirely new. The design, carried out in a delicately modified version of English Georgian, or Colonial, with a distinct flavor of Adam influence pervading the carved limestone trim, possesses an architectural distinction all its own—quite aside from the overly much discussed incidental embellishment of its "purple" glass. Much of this character is in the brickwork, water-struck brick, carefully selected under Mr. Parker's supervision to obtain a prevailing purple and brown color note in the stretchers and headers laid into the wall face. This color scheme is aided by the use of a selected dark sand and an irregularly surfaced joint.

The bricks are laid up in an irregular English Bond; irregular because no especial importance was attached to balancing the upright joints exactly over the stretcher courses, with the result that the alternate header courses are laid up with regard only to their disposition within their own course; and a most pleasing irregularity of effect has resulted. The first-story windows are additionally marked with a row of headers outside the frame; and the attic story—more than usually subservient to the façade—was, as a matter of fact, left much as in the old house, a slight change in the dormer top and a new color treatment, both in the metal dormers and the old tile roof, being about the extent of alteration attempted.

The vestibule is lined with Travertine, and the front doors are rough paneled and painted in several varying tones of blue and green to a genuinely "antique" appearance. The doors throughout the house have been made from discarded pieces of oak and English oak veneer, used to give added interest and character to the new interiors in which their rough, cracked and gnarled surfaces appear.

The principal portions of the first and second floors were all remade to accord with the occupants' ideas, and it is with this portion of the house—along with the front to the street—that we are therefore concerned. But before entering upon their description a few more words are still to be said about the plan, because the house is, in several important particulars, different from the conventional



FIRST FLOOR HALL, ENTRANCE SIDE—RESIDENCE OF
J. HARLESTON PARKER, ARCHITECT, BOSTON, MASS.



FIRST FLOOR HALL, STAIRCASE SIDE—RESIDENCE OF J. HARLESTON PARKER, ARCHITECT, BOSTON, MASS.

city block plan. First it should be noted that the second floor contained a front living room and a rear dining room (instead of the more customary library), connected by a hall—also of a difference. This placed the kitchen upon the first floor at the rear, and probably left plenty of room for that already obsolete element—a wine cellar—in the basement below. The first floor thus contains a reception room at the right of the entrance—used by Mr. Parker as a more informal smoking room because of his determination to make the house essentially livable and comfortable as a home.

Back of the front room on the entrance floor the staircase hall occupied the whole width of the lot — an unusually ample one of twenty-six feet in width with the staircase well recessed at the side behind the smoking room, leaving the space in front of the entrance vestibule entirely free and clear—an important detail—adding spaciousness to an already wide area and making the hall more available for use as a room in the first-floor plan. Originally the staircase had started from well out in this space, with a center run to a landing, where the stairs divided and then went on to the second floor in two rooms—a large Southern Colonial motive that Mr. Parker found somewhat too pretentious and crowded for even this ample hall; and so he took down and rebuilt the staircase in the form it now appears in the photographs—landing on the second story toward the rear, near the dining room door. This staircase had originally extended only from the first floor to the second, where it stopped, the staircase serving the bedrooms above starting again from the second floor and being placed on the opposite side of the house.

This arrangement made it possible to square out the ceiling over the first flight of stairs, under the third floor, and again add to the effect of spaciousness desired; while the start of the staircase to the rooms occupied by the family above is unobtrusively concealed by the wall of the second floor hall containing the niche and statue—the latter a fine family copy of the well-known original—except at the point where the first few steps of the flight and the landing occur in the archway opposite the landing of the first flight upon the second floor.

The hall has been treated in the simplest fashion on both stories. A rough plastered wall, with a brown coat floated with a felt float and then partly scoured, is left as the finish. A plain dark floor of eighteen-inch square tiles of black and green slate, diagonally laid inside a black border and a low black slate base, covers the first floor; eighteen-inch gray squares inside a black slate border the second. A simple, roughly molded plaster crown-mould, with a dull gilt rope moulding at the bottom marks the line of the ceiling, leaving the distinctive furniture, the few pictures, one or two tapestries—and last, but certainly not least, the light fixtures —to give emphasis and distinction to the space. The stair rail is a delicately modelled design in alternating units of cast and wrought iron, touched in with some light color and old gilt, and notably graceful and light in effect.

Mr. Parker has included two unusual conveniences in his plan. The small vestibule occurring between the front hall and the service stairs admits not only to the house elevator, but is also furnished for use as a small toilet or dressing room, which, with the lavatory opening from one side, makes it possible for arrivals by automobiles to make themselves entirely presentable here before appearing upon the floor above. On the other side of the hall, the pantry opening under the stairs from the kitchen can—by means of a blind door beneath the stair stringer—also be put to use as a service connection with the front hall and door, whenever the little dressing room is occupied for that purpose.

The smoking room on the first floor contains the dark green marble mantel and grate already referred to, the walls are covered with grasscloth, the wood trim and ceiling mold (it is hardly more) are painted a dark green, and the whole room forms merely an enclosing frame for the many old pictures and prints—the former mostly of old merchant ships —that crowd the walls, and the old pieces of Chinese inlaid and lacquered furniture brought back by a merchant



SMOKING ROOM—RESIDENCE OF J. HARLESTON PARKER, ARCHITECT, BOSTON, MASS.

forbear from a trip to the Orient. Brown velvet hangings at the windows tone in with the walls, and the whole room excellently fulfils its purpose of a somewhat masculine lounging room, livable and homelike, in which the "mere creature man" may take such comfort as abides in deep upholstery and tobacco without paying undue regard to where his ashes may be deposited by any sudden or incidental gesture.

One of the few structural changes undertaken was in the front, second story room, where the interior rear wall was moved back some three or four feet into the hall, to ease up the dimensions and also to achieve that *bête noire* of the usual decorator, a "square" room. Again has liveableness been considered the chief *desideratum;* and once again has it been attained in this room, walled from floor to ceiling in paneled oak, with carved cornice, mantelpiece and door architrave, after the Georgian fashion. On either side of the entrance door are bookcases, recessed into the thickness of the wall, and left unglazed and undefended, so that mellow tones of old calf and leather bindings may fulfil their ordained purpose of harmonizing and enriching the paneled oak. Here, again, Mr. Parker has succeeded in solving another of those difficult problems of the house furnisher, what to do with the



SECOND FLOOR HALL—RESIDENCE OF J. HARLESTON PARKER, ARCHITECT, BOSTON, MASS.



MAIN STAIRCASE LANDING ON SECOND FLOOR—RESIDENCE OF J. HARLESTON PARKER, ARCHITECT, BOSTON, MASS.

upright piano. He has, below the shelves of one case, adjusted in width to the width of his piano case, left a space of just the right size to allow the piano to be set inside this recess, where, by finishing the exposed front of the instrument in oak to match the wall, it is effectually concealed and its polished ebony and rosewood case has, for once, become innocuous. This arrangement also makes it possible to place a concealed light under the bottom of the shelf above, exactly where it will best throw down upon the music rack, another feat most difficult of successful accomplishment.

The color of this room varies between the tones of the oak—rough-grained, knotted and gnarled, cracked and irregularly moulded, with the surface brushed to obtain added interest of texture, treated only with a dull waxed finish—and the grey white and dull soft green of the slate and marble mantel (in part of old material), the latter color re-echoed in the dull green figured hangings at the windows, dropping from behind their coved cornice, covered with the same material, and a pendent fringe along the lower edge. This room is floored in eighteen-inch squares of oak, stained very dark, and with the fine old furniture—and another bit of color in the coat of arms over the mantel—completes the bare description of an entirely pleasing, attractive and livable living room.

By the same deft means as he has employed elsewhere throughout the house, Mr. Parker in this comfortable living-room again is successful in crowding its formal walls with old pictures, and the margin of the room with furntiure, inherited from a number of generations. The pieces shown in the photographs are readily recognizable as worthy exemplars of the best periods and early styles in this country—the pair of old gilt mirrors flanking the mantel breast, for instance, contain the labeled record that they were "made by W. Lewis, Charleston, South Carolina, in 1777," where they were



DINING ROOM—RESIDENCE OF J. HARLESTON PARKER, ARCHITECT, BOSTON, MASS.



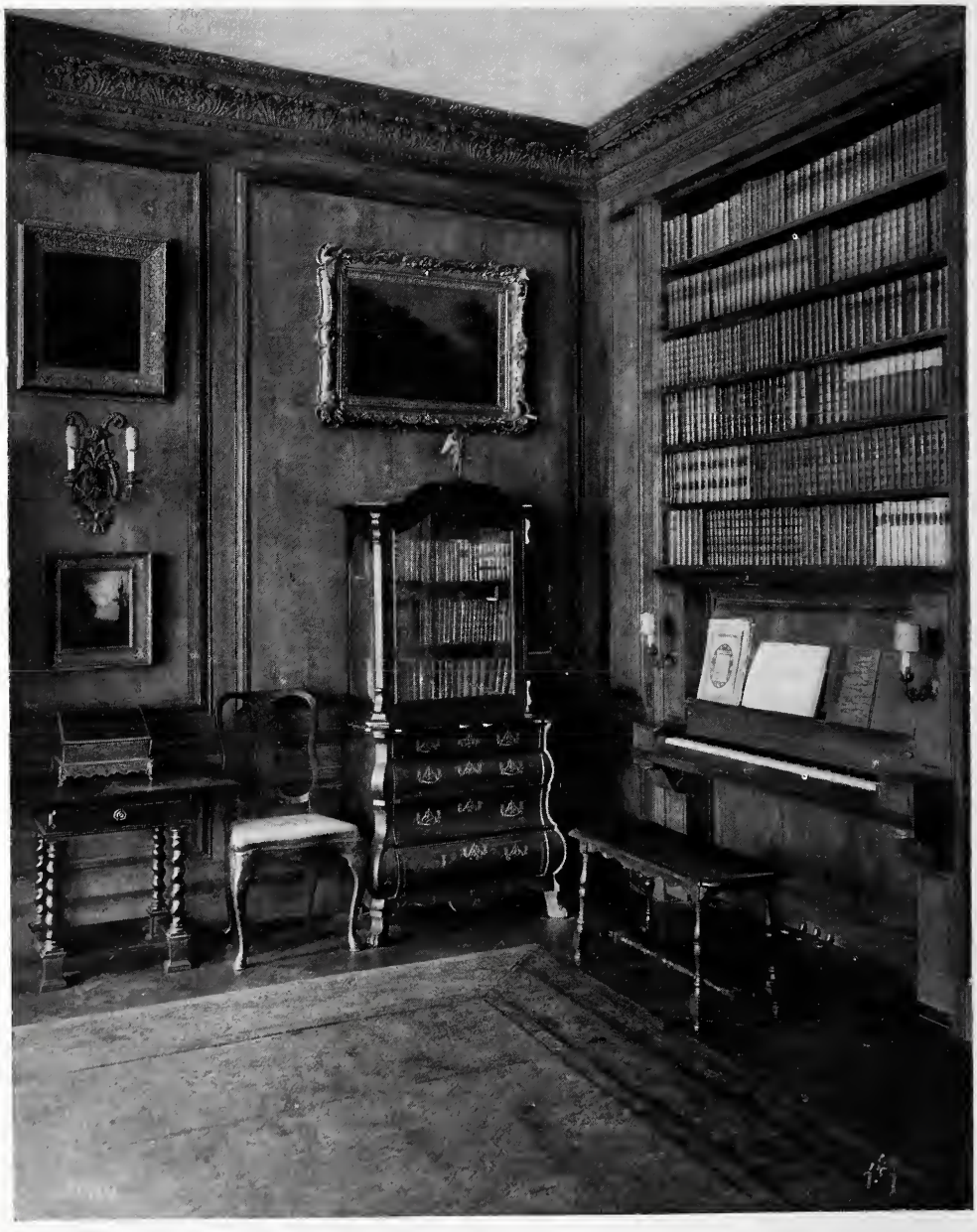
DINING ROOM—RESIDENCE OF J. HARLESTON PARKER, ARCHITECT, BOSTON, MASS.



LIVING ROOM CORNER NEAR WINDOW—RESIDENCE OF
J. HARLESTON PARKER, ARCHITECT, BOSTON, MASS.



LIVING ROOM—RESIDENCE OF J. HARLESTON PARKER, ARCHITECT, BOSTON, MASS.



LIVING ROOM CORNER AND PIANO—RESIDENCE OF
J. HARLESTON PARKER, ARCHITECT, BOSTON, MASS.

bought in the year 1819 by Peter Parker.

Of the new interiors, there remains only the dining room still to be described. This, as is evident in the photographs, is more formal in derivation, being modeled, or influenced rather, by some French interiors of the Regentcy. And again only a close and appreciative observer will note that any too literal copying of foreign moldings and details has been carefully avoided. The result is perhaps even more delicate (and here, too, the moldings have been blurred and softened on the sander) and more suited to the smaller size and greater proportionate height of the room over its recognizable originals. The molding of panels and at openings is at once delicate, rich and varied; and the final *cachet* is given this interior by the two painted panels over the side doors, by a well known French artist, M. P. V. Galland, which belonged in Mr. Parker's family and had been formerly used in a house in New York.

Finally, these wood walls have been painted a sufficiently dark and warmly tinted grey to avoid any of the usual coldness often felt in a room of this style; and this color has again been warmed by the plain crimson carpet over the floor of eighteen-inch black slate tiles, laid square within a margin and base of grey waxed Knoxville, and old crimson hangings at the windows, which have been glazed with an irregular and bubbly cathedral glass of a warm tinge, which not only warms and diffuses the light from the rear—and north—but also prevents the eye from visioning too clearly the rear façades of the houses on the backing street. The mantel is of Alps green marble, with gilt ormolu ornaments, and the walls have lent themselves, with unexpected pliability, to carrying the unusual number of interesting old family portraits that are both hung upon and set within their panelled surfaces.

It should be clear by now that Mr. Parker's house is not a show house, in the sense that phrase is generally employed. On leaving, one carries away most distinctly its flavor of dignified relaxation—of livableness and charm. It possesses individuality, amply but never obtrusively evident. It is obviously solid and substantial; a worthy descendant of those times when the resident family had acquired the substantial and elegant pieces that the house interiors set forth so nicely and so well. In how few houses could there be gathered together the amount and variety of furniture and pictures combined within these walls without oppressively cluttering and confusing the visitor? Here Mr. Parker has succeeded in so arranging plan and treatment as to allow each object its full significance and value—as in the Copley at the left of the dining-room mantel, for instance.

Outside, a backward glance discloses this same spirit animate upon the exterior; and recalling the narrow crowded aspect of the bay-windowed front the new façade has supplanted, one cannot but the more fully appreciate the greater breadth, dignity and simplicity of the new treatment.

A STUDY IN MUSEUM PLANNING

BEING AN EFFORT TO ESTABLISH A WORKING BASIS FOR THE SOLUTION OF CURRENT PROBLEMS IN MUSEUM PLANNING

BY MEYRIC R. ROGERS

[*Mr. Rogers is a member of the staff of the Metropolitan Museum of Art. His paper, which was read before the convention of the American Association of Museums, May* 21, 1919, *aims to establish a solution for a group of questions which is engaging the attention of museum officials, relating to circulation, safety of objects, transportation, administration and control, etc. The paper is to be published in "Museum Work," the organ of the Association of Museums, as well as in The Architectural Record, the purpose being to place the problem stated by Mr. Rogers before both architects and museum officials in order to obtain comments on his solution, and possibly alternative solutions, from both sources. The results will be summarized by Mr. Richard F. Bach, also a member of the staff of the Metropolitan Museum, and published in "Museum Work" and in The Architectural Record. It is hoped that discussion will bring out a valuable fund of experience and suggestions. Communications may be sent to Mr. Bach at the Metropolitan Museum of Art, New York, or to The Architectural Record.*—EDITOR.]

WHAT is wrong with our American museums, with our art museums in particular? There is no doubt that there is something the matter. The public feels it generally by suffering unnecessary gallery fatigue; the trustees feel it appreciably in heavy maintenance costs, and, last but not least, the artist of every class is exasperated by it. The secret seems to lie in bad marksmanship. The architect has been uncertain of his target; and the various building committees or their substitutes, the museum administrators, do not seem to have given much solid help or practical expert advice.

In every class of building today the architectural problems have become so complicated that they call each for their own special fund of information and experience. No one man can properly meet all the demands. The architectural profession has been forced to divide itself into groups of specialists, each with its more or less limited field. The particular problems of the bank, the office building, the store, the railway terminal, etc., have been effectively met and solved with fair satisfaction. But the museum, owing to continued modification and extension of functions, has achieved no logical formula of design.

We must first of all change our conception of the museum. It not only receives but gives, and gives bountifully, towards the sum of education and public culture. It is becoming more and more highly organized as its functions increase and its influence broadens; and a correspondingly efficient and highly organized plant is necessary, which can be obtained only by satisfying the numerous definite requirements of the problem. These requirements can not be recognized except by frankly putting aside preconceived ideas and analyzing the situation as it is, a task that must be performed by the museum worker with the advice of an architect experienced in the technical problems of building.

The detailed analysis of the modern museum is another story and far beyond the limitations of this article, which is intended to be merely descriptive of a general scheme for museum planning, built on the results of such a process. This study was undertaken after several years' experience in the actual workings of one

of the country's largest museums, preceded by fairly thorough architectural training.

Before discussing the situation in detail it will be well to give in brief some of the cardinal points which determined the method of attack. In the first place, the conception that a museum of art containing the art treasures of the people should be as far as possible a sort of public palace whose architectural treatment should itself be one of the chief exhibits, internally and externally, was greatly modified. The functional aspect of the plan was made supreme. Only so much of the monumental idea was retained as could readily be harmonized with the dominating idea that the museum of art should be a conveniently and harmoniously arranged background for its contents. From this fundamental conception the following objectives developed and were to become, as it were, the backbone of the solution:

1. Economical utilization of space.
2. Convenient interadjustment of spaces alloted to exhibition, educational and administrative purposes.
3. A plan which would admit of simple "route" arrangement.
4. A plan which would facilitate economy and efficiency of maintenance.
5. A plan which could be extended without radical rearrangement.
6. A reasonable system of lighting.
7. Adoption of a gallery-and-adjacent-corridor exhibition unit.
8. A readily accessible, easily isolated, temporary exhibition space.
9. Relegation of stairways to secondary positions.
10. Ample facilities for the educational functions of the museum.
11. Use of every reasonable means to give maximum service, esthetic pleasure and physical comfort to the public.

With these points in mind the following program was drawn up to serve as the statement of a definite problem. Although it was desirable that the requirements should be as general as possible, it was also necessary to get a working start by making certain specific demands based on the average requirements of a museum of moderate size suitable for a city with a population of from 200,000 to 500,000. In many cases, however, the fullest use of the facilities given has made it possible to meet these requirements more generously than was absolutely demanded. The conditions of the ideal problem set for solution were the following (numbers in parentheses refer to objectives above):

GENERAL CONDITIONS.

1. The building area, exclusive of setting, should not exceed 40,000 square feet.
2. There should be three main floors, two of which should be used for exhibition purposes (1).
3. Every advantage possible should be taken of any slope of land (1).

EXHIBITION SPACE.

A. Galleries.

Galleries, etc., used for exhibition purposes should offer, in all, about 60,000 square feet of floor space.

1. Large hall, top or high side light, 3,000 square feet, more than one story high (11).
2. Room or rooms for special exhibitions not less than 1,500 square feet in all (8).
3. Not less than 40,000 square feet of general gallery space, exclusive of circulation, giving galleries of varying proportions (11).
4. Court, open to air or not, as advisable, about 3,500 square feet to be used for exhibit of architectural fragments, etc. (11).

B. Circulation.

1. Small concourse or lobby in connection with main entrance (2).
2. Means of access to galleries from entrance without using galleries as such, should be provided (7).
3. Doorways into the galleries should be reduced to a minimum requirement of safety (4).
4. Public staircases should be spacious, convenient and easy, but not architecturally prominent, and few in number to avoid confusion (9 and 11).
5. Passenger elevators close to main entrance (2 and 11).

C. Public Service.

1. Ample check rooms near entrance (4 and 11).
2. Space for information desk and sale of photographs near entrance (4 and 11).
3. At favorable points not actually in the galleries provision should be made for affording the visitor a resting place (11).
4. General rest room for public, with small lunchroom attached (11).
5. Smoking room, toilet, etc., should be provided (11).

EDUCATIONAL FACILITIES (10).

1. Auditorium to seat about 500, with separate entrance, cloak room, etc., which can be used when galleries are closed.
2. Library of about 1,500 square feet, with basement stacks.

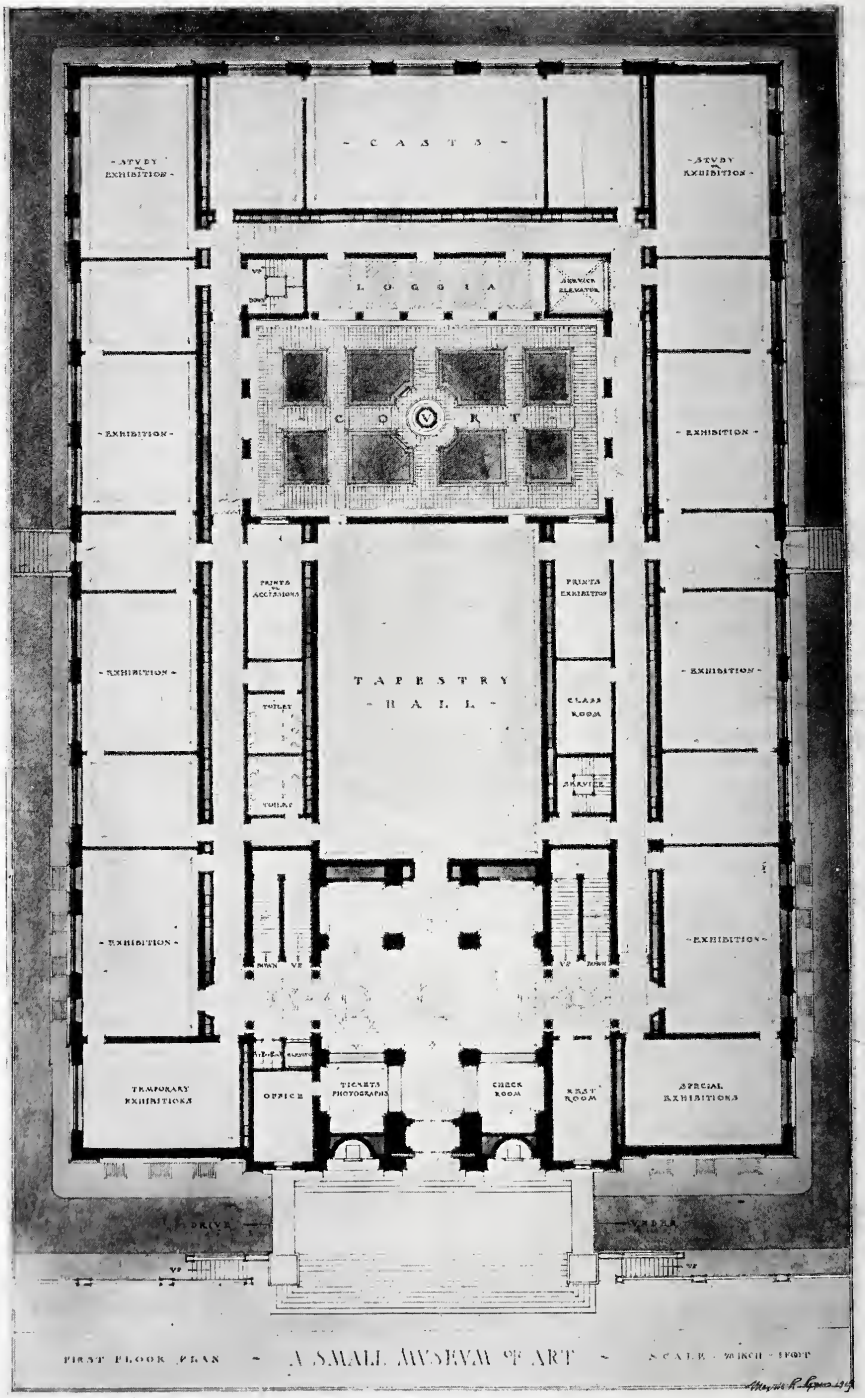


FIG. 1. GROUND FLOOR PLAN—DESIGN BY MEYRIC R. ROGERS FOR A SMALL MUSEUM OF ART.

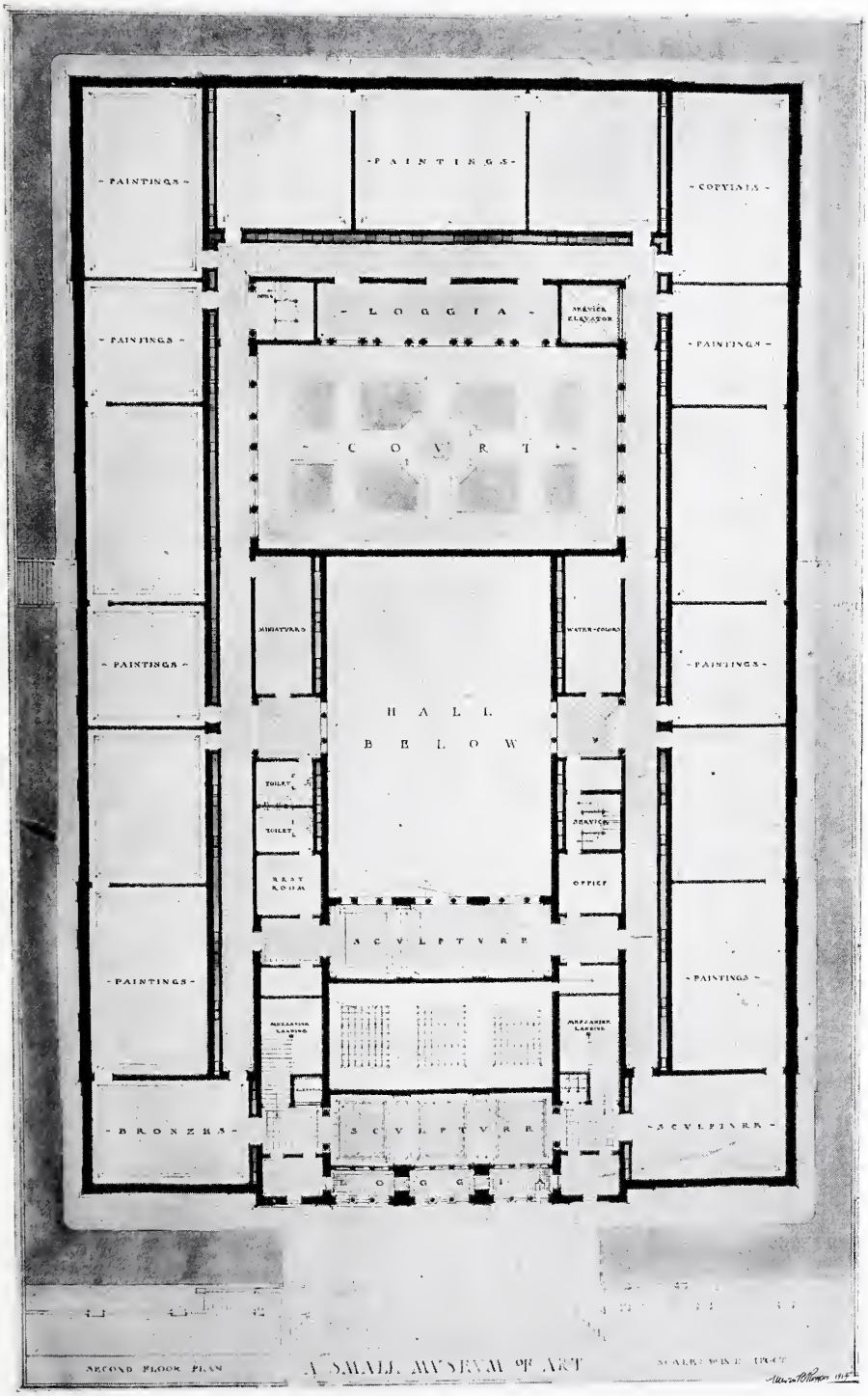


FIG. 2. SECOND FLOOR PLAN—DESIGN BY MEYRIC R. ROGERS FOR A SMALL MUSEUM OF ART.

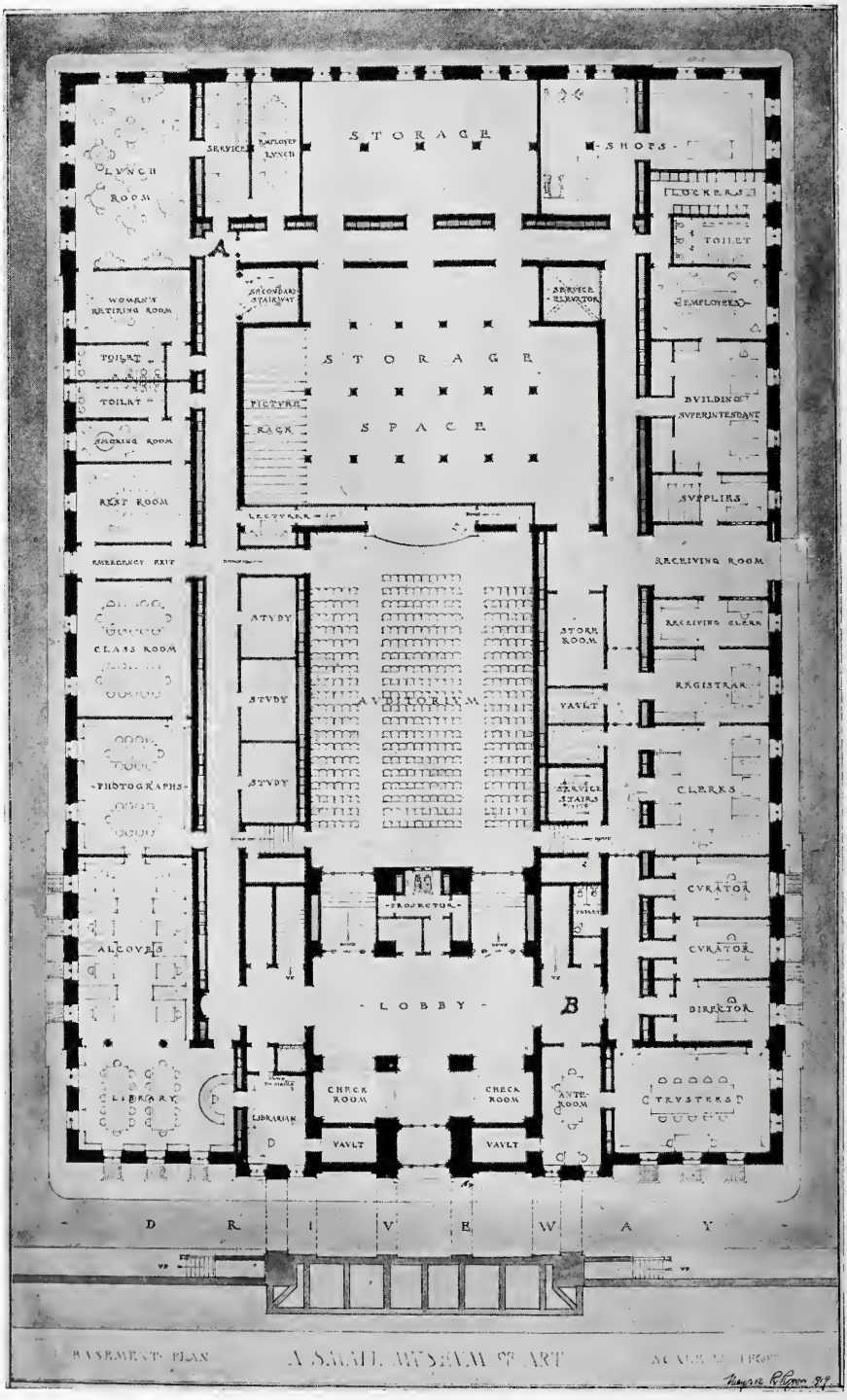


FIG. 3. BASEMENT FLOOR PLAN—DESIGN BY MEYRIC R. ROGERS FOR A SMALL MUSEUM OF ART.

3. Study and class rooms.
   (a) A well lighted, well ventilated room to seat about 100, on each floor.
   (b) Children's room close to library.
   (c) Other study and class rooms should be provided wherever possible.

ADMINISTRATION.

A. Control.

1. Centralized control of the main arteries is essential (4).
2. Emergency exits should be provided in wings remote from main entrance (11).
3. Entrance to auditorium and adjacent circulation must be easily separable from the gallery area (4).

B. Staff Offices.

Centrally located but not in direct connection with public circulation (4).

1. Trustees' room, about 750 square feet, with ante-room.
2. Director's room connecting with assistant's office.
3. At least one curator's office.
4. Clerking space.
5. Office for Registrar and assistant within easy reach of the curatorial offices, receiving and storage rooms.
6. Office for superintendent, etc.

C. Work Rooms (4).

1. Large, well-lighted room or rooms for repair or carpenter shop.
2. Supply room.
3. Receiving and packing room, commodious and central.
4. Service entrance in connection with above.
5. Small photographic studio.
6. Locker room and toilet for employees with rest room attached.
7. Service for lunch room.
8. Freight elevators conveniently placed with reference to storage room.

D. Storage (4).

1. Vaults in connection with offices of trustees, librarian, and registrar.
2. At least 40,000 cubic feet of good storage space.

E. Mechanical Plant.

Adequate space for ventilating, heating and humidifying apparatus must be provided.

The accompanying illustrations show the solution of the problem just stated. The area occupied by the building is a simple rectangle, approximately 260x160 feet, lying on a gentle slope with the ground rising about six feet from front to rear, thus making it possible to reach the building by a driveway running underneath the terraced steps leading to the main entrance. From this driveway a wide area runs around the entire building, giving access, on one side, to the service entrance and, on the other, to an emergency exit from the auditorium. This area also facilitates the adequate lighting of the basement on the ground floor by ordinary windows, and avoids the necessity for an elaborate external lay-out.

On the main exhibition floor (Fig. 1) the entrance is through a weather vestibule directly into a barrel-vaulted sky-lit lobby with which a corridor, running around the entire building, connects on the right and left. This insures direct approach to any gallery or group of galleries in the entire circuit without using the galleries themselves for circulation. Joining the lobby on the main axis is the large tapestry hall, which gives the visitor an important vista the moment he enters.

The vaulted staircases to the ground and second floors open from the sides of the lobby, into which they look again from a mezzanine landing before reaching the second floor. The plan shows the placing of the special exhibition rooms on the façade and how these can be connected with or separated from the main range of galleries without disorganizing the circulation.

At the rear of the tapestry hall is the garden court, in this case with a glass roof allowing the arches between it and the corridor to remain unglazed. An arcaded loggia lying between a small secondary stairway and the service elevator separates it on the remaining side from the encircling corridor. The corner room marked "Study" can also be removed from the general circulation without difficulty and could well be used either for class room or study purposes. The cast collection, of particular interest to students only, is relegated to the rear galleries. One of the most objectionable features of some of the smaller museums is the accumulation of casts near the entrance, in places of prominence which should be given to original works of importance.

On the second floor (Fig. 2) the general arrangement is practically the same. Connecting the two main stairways is a broad corridor with segmental vault lit by indirect side light through a small

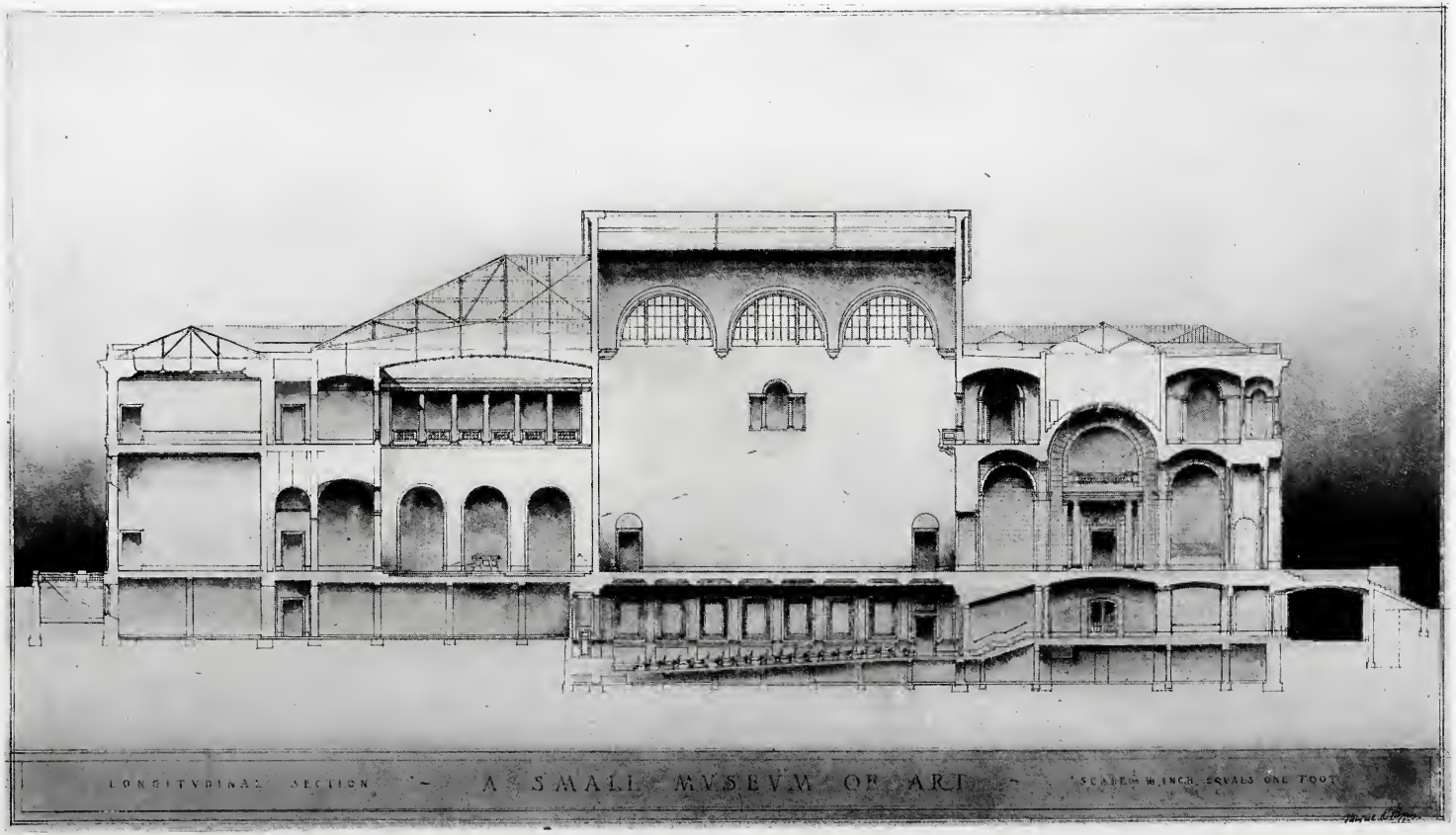


FIG. 4. LONGITUDINAL SECTION — DESIGN BY MEYRIC R. ROGERS FOR A SMALL MUSEUM OF ART.

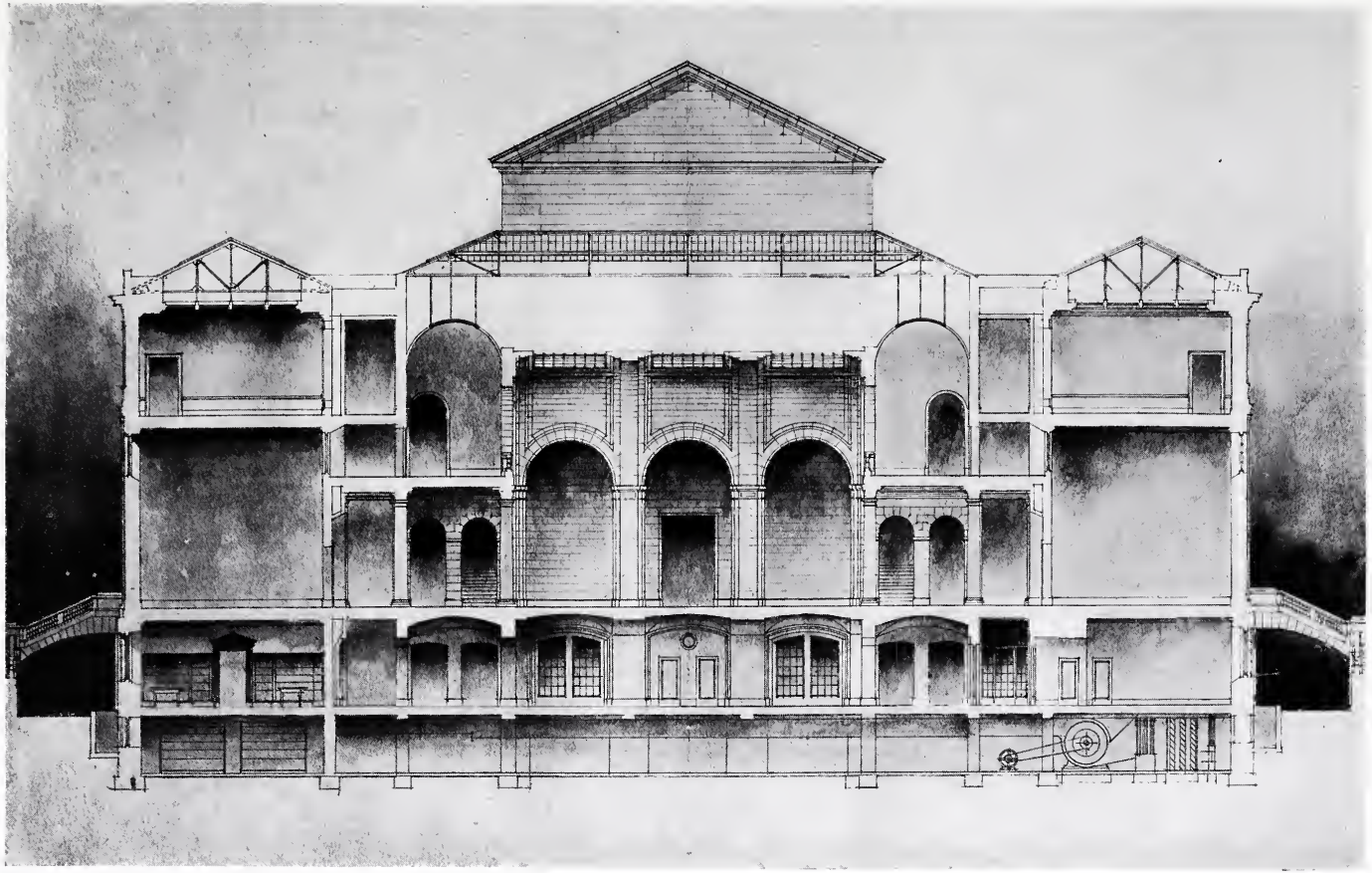


FIG. 5. TRANSVERSE SECTION—DESIGN BY MEYRIC R. ROGERS FOR A SMALL MUSEUM OF ART.

loggia opening on the façade. This, with a similar corridor lit from the great hall, would form appropriate galleries for smaller sculpture. The light in either case is capable of augmentation from the roof. The visitor, leaving the two rooms on the plan assigned to bronzes and sculpture, enters either directly into the first range of painting galleries or into the corridor from which, about half way down, a small resting place gives a glimpse into the great hall below. The corridor also opens through a colonnade on to the garden court and into a loggia similar to that on the lower floor. The corner galleries, as before, can either be used as further exhibition space or reserved for the special use of copyists or utilized as studios and work rooms.

One of the main values of this type of plan from the museum point of view lies, however, in the possibilities it offers for a convenient and economical arrangement of the administrative area in connection not only with the exhibition space but with that used for the other public functions of the institutions.

The basement (Fig. 3) or first floor plan gives a good idea of what is meant by this. The problem was to secure a location for the administrative offices that would be readily accessible, yet, at the same time, definitely cut off from encroachment by the public. This was accomplished by opening to the public the entire left of the plan from the secondary staircase "A" to the main staircase "B," and reserving the remainder.

The chief use of the auditorium, of course, being for stereopticon lectures, daylight is not necessary and can therefore be given the space beneath the great hall. This, in its turn, enables the utilization of access areas corresponding to that given by the main entrance. Direct access to the lobby from the outside is obtained by an entrance from the driveway beneath the terrace, which can be utilized when the museum proper is closed. Access to the rest of the museum on such occasions is easily preventable.

The arrangement and sequence of administrative offices is more or less diagrammatical, following in the main the excellent organization of this area in the Art Museum in Cleveland, Ohio. For practical purposes the receiving room would be enlarged by the addition of the space assigned on the plan to the supply and receiving clerks and a consequent reduction of the space alloted to the building superintendent. The storage room is considerably more than that demanded by the program and probably more than enough for any active museum of its size. It is readily accessible to the office of the registrar, under whose control it would be, and is directly served by the freight elevator, which could, of course, open directly into it.

The block plan (Fig. 6) gives some idea of the general scheme of extension should such be necessary, though the complete formation of the two courts would hardly be called for except in the development of a museum of the first magnitude, at which this study does not really aim. A study of the complete plans in this case will show how this extension would be connected with the extant portion by a continuation of the north and south corridors and a slight adjustment of the adjoining galleries, two of which would have to rely on artificial light, should the extension be two stories in height.

The longitudinal and transverse sections (Figs. 4 and 5), taken in conjunction with the plans, will show more clearly the interrelation of the various parts. It will be seen that the treatment of the interior is of the simplest sort, with the exception of the enrance hall, which is here finished in stone in a stylistic manner as neutral as possible. For the rest, tinted plaster with plain wood or stone trim is intended, this being found in the main to be the most satisfactory museum background. From these drawings the lighting system of the galleries on the main floor will be seen to be a sort of attic or high side light. In general it seems to be evident that clerestory lighting is superior to all other forms for every purpose, except, perhaps, painting galleries, by virtue of its softness and general freedom from glare. It has therefore been used not only in the great hall, where a flat ceiling would have produced happier proportions, but also in

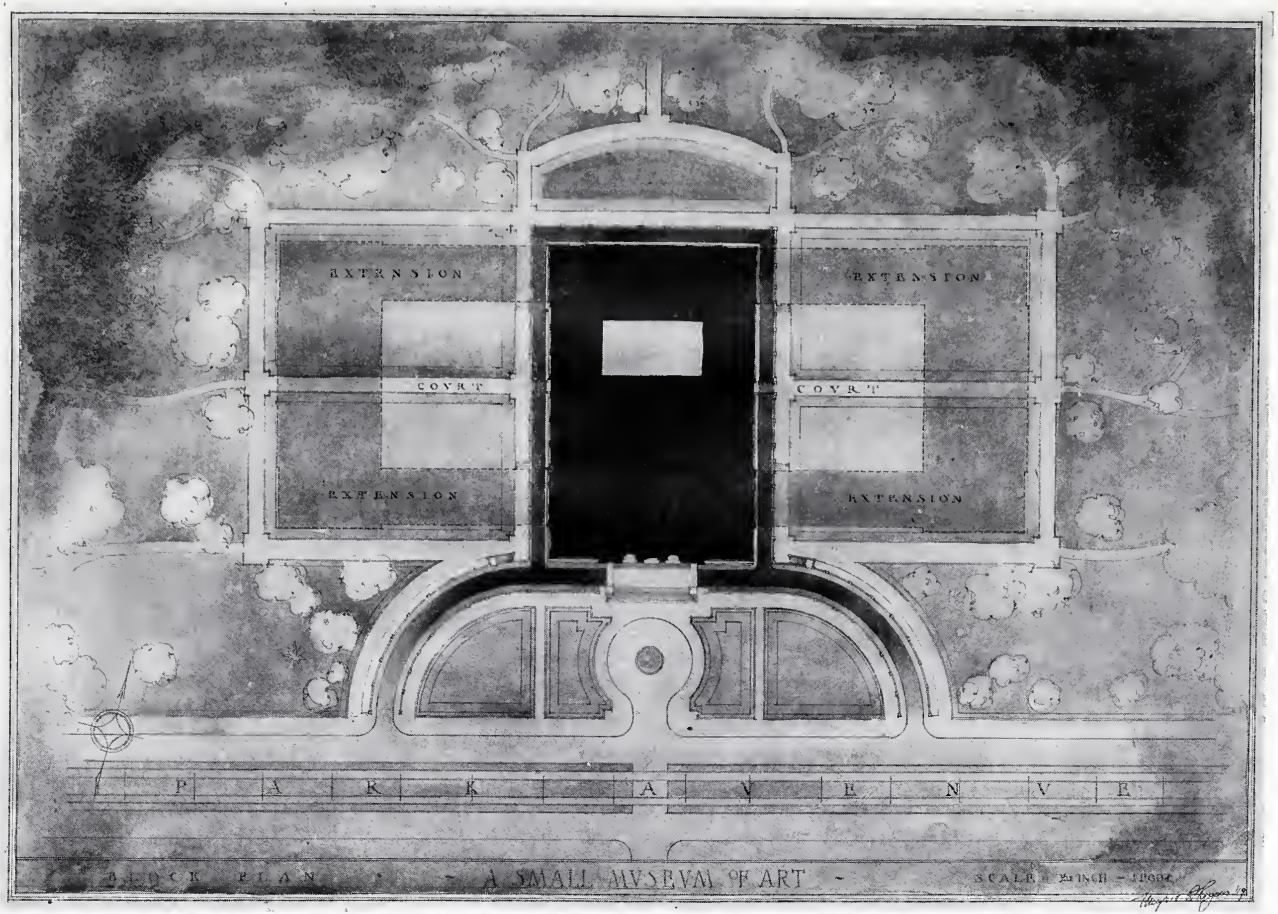


FIG. 6. BLOCK PLAN, SHOWING PART CONTEMPLATED IN THIS ARTICLE AND FUTURE EXTERIORS. DESIGN BY MEYRIC R. ROGERS FOR A SMALL MUSEUM OF ART.

the side galleries on the main floor, where the windows run horizontally and practically the entire length of each gallery. With the openings placed in the most effective position and the walls kept light in tone, the wall area under the windows will be sufficiently illuminated for ordinary objects in relief, provided the sill of the openings is kept high enough to avoid direct glare of the eyesight. This, of course, necessitates a gallery of rather more than usual height, the upper part of the room being, in a sense, a diffusion chamber. The exact amount of window area required to give sufficient illumination would, of course, be obtained only by experiment and trial, but the quality of light thus obtained would be greatly superior to the usual direct side light which also renders the window wall practically useless for exhibition purposes.

With the first floor reserved in the main for the exhibition of objects in the round, the second floor, with top light, is practically given over to painting galleries. These galleries have been kept rather smaller and lower than usual. The excessive height in most painting galleries with top light is not only unnecessary, but positively unsightly when only one line of pictures is hung. The center portion of the glass ceiling would in this case be made somewhat less translucent than the side panels and, by the use of prismatic glass, effort would be made to concentrate the light on the side walls to the height of ten feet or so above the floor.

The mechanical plant has been placed in a sub-basement, in which run the main air channels to supply the various branches in the two series of duct walls. In this connection it may have been observed that wherever possible the solid wall has been kept on the gallery side so that heavy objects may be fastened on the wall without the constant danger of breaking down duct partitions or breaking into the ducts themselves.

As to actual structure, the plans have been made for brick bearing walls, carrying floors of steel beams, and terra cotta arches. A steel skeleton or reinforced concrete could be substituted so far as the plan arrangements go, though trouble might arise in taking ducts around columns and girders. The New York building law has been followed in its structural, fire and sanitary regulations in order to assure a thoroughly sound and fireproof structure to which the public can freely entrust both its treasures and itself.

The plans described, it is fair to say, meet fully and squarely the requirements specified in the program and in that sense solve the particular problem. It should be remembered, however, that the plans illustrated, while they could, with a few slight changes, be turned into a workable museum, are in the largest sense of the word diagrammatic and are specific only in the sense that they offer a concrete illustration of what can be done with this type of plan and program. Varying conditions and localities would, of course, necessitate considerable changes in detail, but the fundamental idea and organization of this plan could be retained to advantage. Exterior architectural expression and precise internal arrangement should vary to meet specific demands, but the basic ideas of organization and interrelation of parts must remain constant if our fundamental conception of the functions of the museum remains unchanged.

The chief trouble has been and is that the museum is considered primarily as a monumental building. This is contrary to the fact, for, unlike other structures of its class, the museum is not complete until the collections are installed. In the last analysis, it is the contents we want to see and not the museum building. When our attention is distracted by architectonic display, our minds and muscles strained by inconvenient planning, and our senses disturbed by incongruous settings, we may be reasonably sure that the building and its functions are not in agreement. The arts are rapidly coming into their own, after having been neglected for almost a century; if we consider the museum to be their cradle and nurse rather than their sepulchre, we must build accordingly.

The LATERO-SECTIONAL MODELS OF BELLOWS & ALDRICH

A Valuable Contribution to Architectural Technique

By SYLVESTER BAXTER

THE value of models in architectural practice has long been appreciated. They not only serve to show a client how his building will look in actuality; they help the architect himself in forming a better estimate of his work and its relationship to environment. And since they exhibit all sides of a building they perform a service that otherwise would demand several perspectives.

The worth of the architectural model as a technical device has lately been notably enhanced by an amplification of its services in a simple and ingenious fashion, an improvement for which credit is due to the Boston firm of Bellows and Aldrich, who put the use of this device freely at the disposition of their fellow architects. And since experience amply demonstrates its value as a legitimate and efficient "business getter" this service will be cordially appreciated.

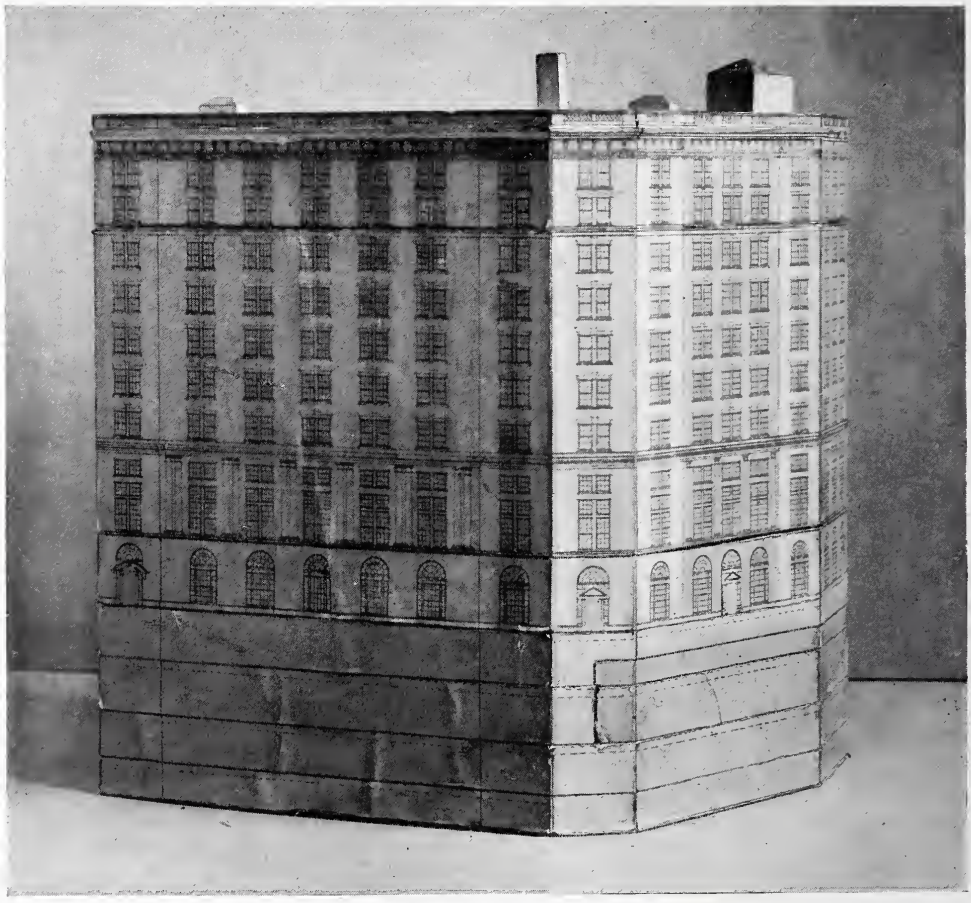
"Latero-sectional" models are simply an application of the familiar principle embodied in dissected maps and puzzle-pictures. The model is dissected either at each story, or at the particular story or at any other point where "look-in" may be desirable. It thus becomes, if not four-dimensional, at least an approach to that mystically mathematical status to a degree that perhaps might well be described as three-and-a-half dimensional—according to the explanation of the fourth dimension that indicates its service as presenting a simultaneous knowledge of the whole of a given unit in all parts, within and without, as well as in its familiar three-dimensional aspects, and it will be seen that this device quite appreciably approaches the four-dimensional ideal.

In these days of economy the ease and cheapness with which a latero-sectional model may be constructed constitutes not the least aspect of its value. In the first place, elevation drawings are made in the usual way to the desired scale. Blocks of suitable hardwood plank, well planed to the desired thickness and smooth-finished, are cut to the corresponding dimensions. They are then built up into the model. The elevations, cut into sections, are pasted on to the sides; the floor-plans on to the upper horizontal surfaces; the ceiling plans, if desired, on to the lower sides. The model as a whole, containing almost the entire anatomy of the structure, may thus represent a building in all the detail desired. Projecting parts may be easily made separately and affixed or detached. Models ranging from the comparative simplicity of an office-building or a shoe factory to the complex of a great institutional or monumental structure may thus be easily and cheaply made and exhibited at a glance in a way that imparts a clear understanding of the most intimate details.

The device has an interesting history. It originated in the presentation of a damage-case in court. Mr. Bellows chanced to talk with a friend about a case which the latter, an owner in a hotel property, had against the Boston Subway Commission for damages to be caused by the contemplated extension of the East Boston tunnel to and beyond Bowdoin Square, cutting in at an angle across the front of the property and taking off a considerable slice which, although not encroaching upon the existing building, interfered with its possible reconstruction under modern hotel conditions. The property in question was the old Revere House, one of the most

famous of the nineteenth century hostelries in the country (Astor House and Tremont House period), which when Paran Stevens was landlord, entertained probably more distinguished guests than any other hotel in Boston. Among its guests was Albert Edward, the Prince of Wales, who, on his visit to this country when a youth, occupied a magnificent suite, said to have been the most finely furnished to be found in any hotel of that date.

It was suggested that the nature and extent of the damage to this property might best be illustrated by a model specially constructed for the purpose. His friend asked him if he would be willing in the line of his professional activities to construct such a model and produce it in court when the case came to trial. This was agreed, and the model produced was devised on the novel lines above described.

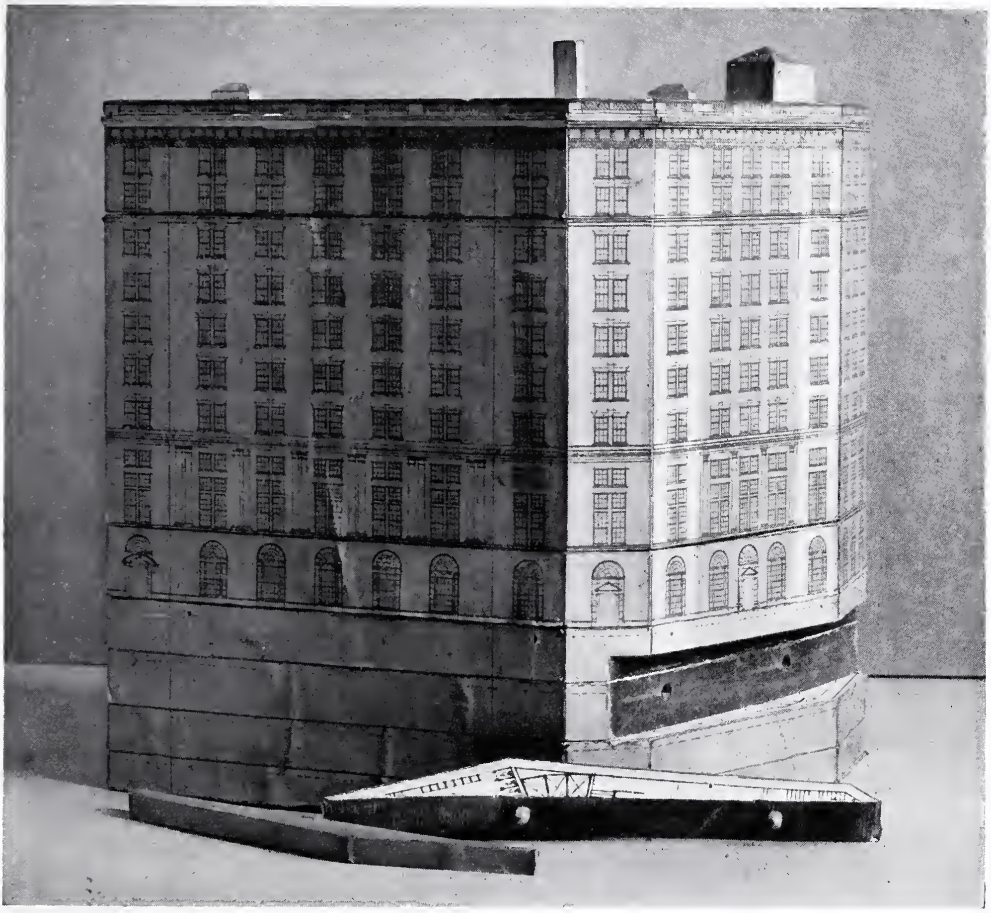


MODEL OF PROPOSED NEW REVERE HOUSE, BOSTON.
The model was constructed to show the damage to the property by the laying out of a subway. According to hotel requirements in a great city there are four floors below the street.

When brought into court there was manifest curiosity on all sides to see the model and learn what it meant. The opposing counsel objected to the submission of the model as being an order of evidence that should not be admissible under the rules governing court procedure. But everyone knows how the average boy takes pleasure in a set of building blocks. Much of the boy remains in grown-up men and even the

judge himself was manifestly curious to see the working of the thing.

The model showed the hotel as a whole with the several stories that in a modern hostelry run deep down into the ground, making valuable space utilizable, not only for ordinary basement purposes, but even for cafés, billiard rooms and other features of an up-to-date hotel equipment. The course of the subway was indicated in the upper part of the basement, which as contemplated for the new hotel extended two stories below the track level. The segment along the course of the subway was removable, showing at a glance the extent to which the proposed development would be interfered with. Also, the character of the proposed new hotel was graphically set forth by illustrating the principal floors as the model was successively taken apart. For instance, the main floor, as shown in one of the accompanying illustrations, was evident at a glance, with its handsome parlor, named in commemoration of the stay of the Prince of Wales, with the spacious Paul Revere Hall adjoining. The importance of the case and the nature and extent of the damage to be caused by the subway construction was made so evident in this way that an award of somewhat more

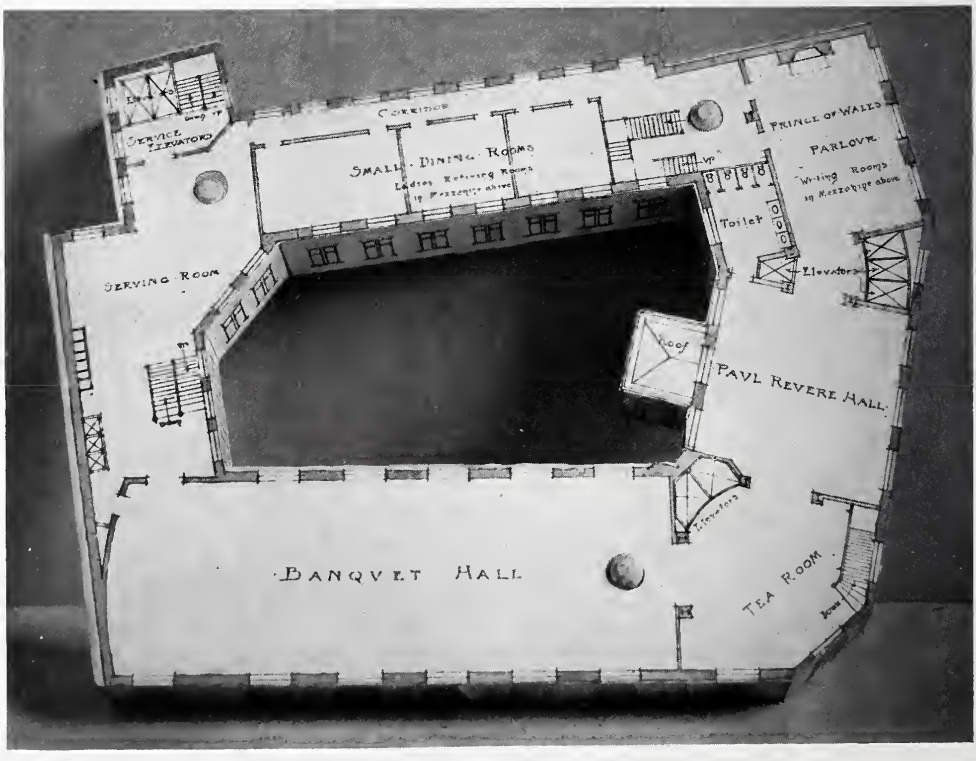


MODEL OF PROPOSED NEW REVERE HOUSE.
The removed segment shows how the subway would cut into the new building and seriously interfere with the plans of the two most important sub-surface floors.

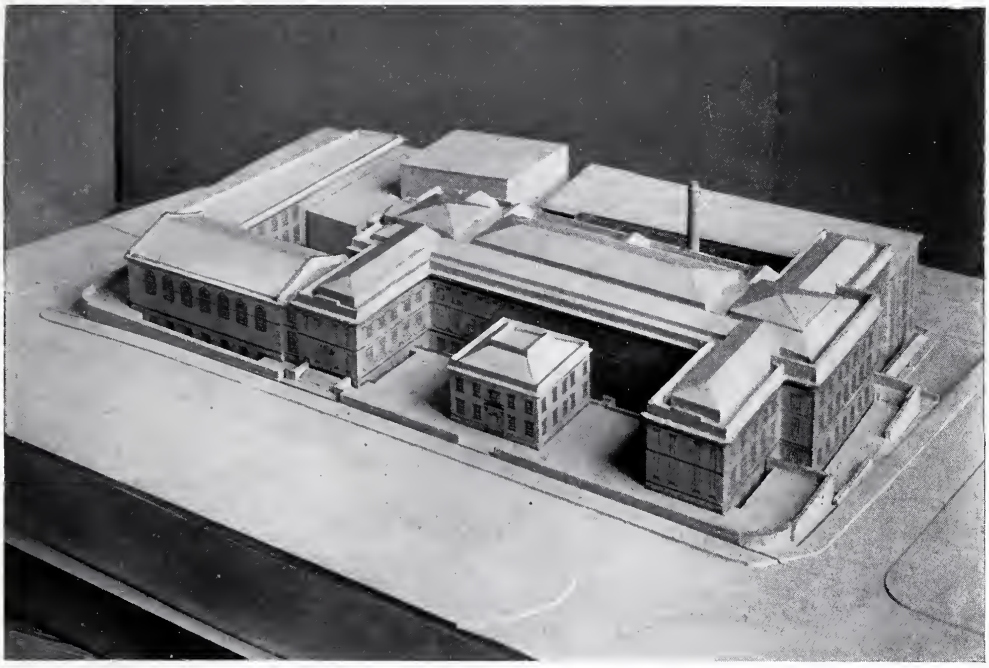


MODEL OF PROPOSED NEW REVERE HOUSE.

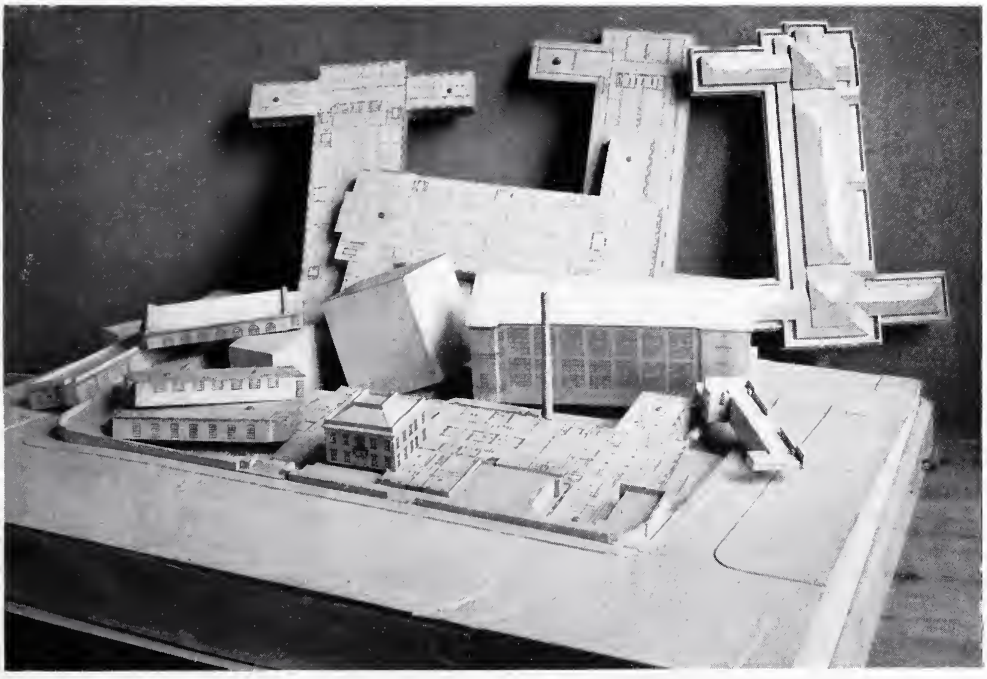
The model disassembled, showing its component parts. Since the five floors occupied by the guest-chambers are all essentially alike in plan one thick section is sufficient to illustrate them all.



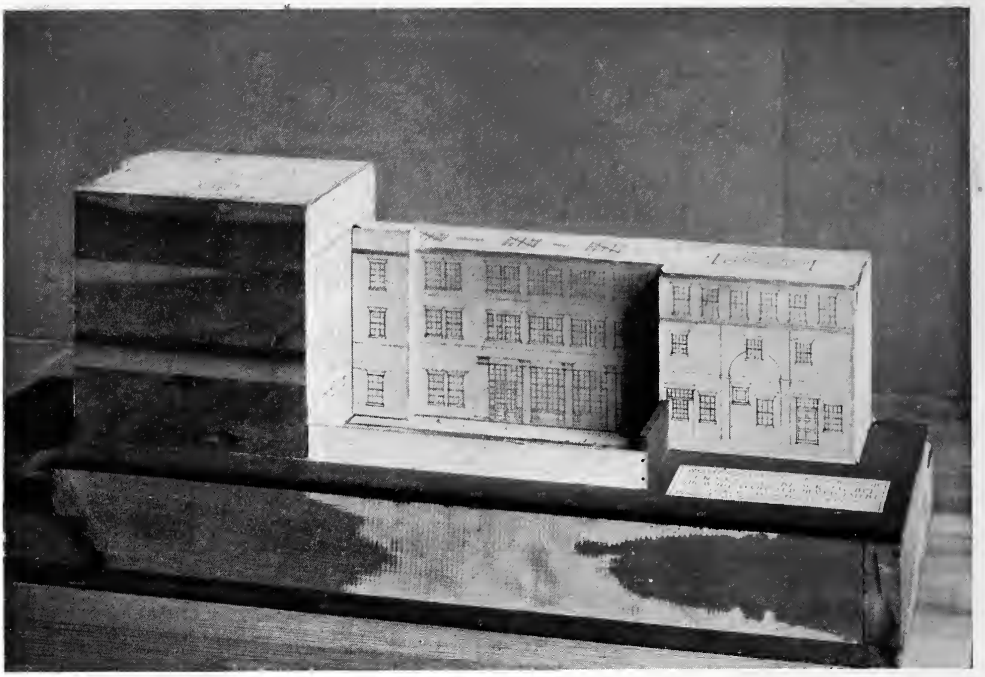
MODEL OF PROPOSED NEW REVERE HOUSE—DETAIL OF A SECTIONAL UNIT.



TENTATIVE SKETCH-MODEL OF AN EDUCATIONAL GROUP.



TENTATIVE SKETCH MODEL OF AN EDUCATIONAL GROUP.
The model disassembled. This complex design comprises an auditorum, lecture room, workshop, heating and power plant. These features are shown in detail by the sixteen units.



TENTATIVE SKETCH-MODEL OF PROPOSED DEVELOPMENT FOR THE WOMEN'S CITY CLUB OF BOSTON.

This model was made to indicate a way in which the space in the rear could be utilized for the extension of the clubhouse, one of the fine old houses on the slope of Beacon Hill. The proposed new L is represented by the latero-sectional part of the model.

than $10,000 damage was made by the jury.

Another model which showed the clients at a glance one way in which the property could be most efficiently and economically developed in the enlargement of existing accommodations is that of the prospective extension of the Women's City Club of Boston. The Club is domiciled in one of the finest old houses on Beacon Street, facing the Common, on the slope of the hill. In the rear was an extensive ell. By constructing a model according to the latero-sectional idea it was shown how fine new accommodations could be obtained by building under this ell instead of demolishing the ell and building a loftier structure on its site, as had been suggested. The way in which the latero-sectional idea can be utilized in showing an exceedingly complex structure or group of buildings is shown by the accompanying illustrations depicting an important technical institution in one of our large American cities. This institution comprises workshops with art galleries, audience halls, etc., with a fine Colonial mansion housing a collection of old furniture. The model, in the accompanying two illustrations, is made to show first the tentative scheme for the institution in its entirety and next the numerous important features of the several portions.

These typical examples are sufficient to indicate how exceedingly valuable an adjunct in architectural practice the latero-sectional idea may be expected to become.



READ MEMORIAL COMMUNITY HOUSE, PURCHASE, N. Y.

WAR MEMORIALS

PART I - COMMUNITY HOUSES FOR TOWNS & SMALL CITIES

BY CHARLES OVER CORNELIUS

FROM the discussion of memorials commemorative of the recent war two general forms emerge—the purely votive one, devoid of practical utility, and the utilitarian memorial dedicated to a special purpose. Much is to be said in favor of both general forms, yet in particular situations there will be valid objections to the one or to the other. The preference cannot be based upon theoretical grounds, for in the choice of individual memorials exigencies of local circumstance intervene to decide the matter almost out of hand. In any form of memorial, however, the quality of beauty is of prime consideration.

Of the various forms which the utilitarian memorial may take none has more quickly or more surely established itself in a position commanding popular approval than has the community house. Within the past year groups of persons, convinced of the appropriateness of this form of memorial, have bent their efforts toward placing before the public the qualifications inherent in community buildings which render them of particular suitability; and a convincing evidence of the validity of their contention lies in the astonishingly prompt response on the part of memorial committees in all parts of the country in favor of the community house as a war memorial. One of the contributing reasons for this unreserved endorsement of the community house is the fact that its latent possibilities have been largely developed by and through conditions arising from the war. A few such buildings, existing before the war, had functioned with so much success that the germ of the movement was already well developed. With the unusual conditions created by mobilization, involving the concentration of large numbers of men in localities where no adequate provision had been made for their entertainment and comfort when not upon military duty, a

form of community house was hastily devised which answered the need in satisfactory fashion.

Here the demands were in the main practical. On the shortest notice a building was required which would serve all the purposes of a club for soldiers during their hours of recreation. Provision had to be made for various forms of indoor amusement, comfortable lounging-rooms were needed as a meeting-place for social intercourse, while restaurants and cafeterias were of primary importance. In these buildings, hastily constructed to meet a pressing need, the solution of the problem seems to have been reached so far as practical layout is concerned, uncomplicated as such buildings were by the necessity for architectural beauty. Many ideas for permanent buildings are contained in the "huts" erected by the various non-military organizations associated with the camps; but it is the hostess house in its best development that brings together the attributes most essenial for incorporation in the permanent memorial houses which are to be erected in the future.

It is to the people most actively interested in these organizations during the war, who saw these houses in successful operation, that we owe the suggestion of giving them permanent form as war memorials.

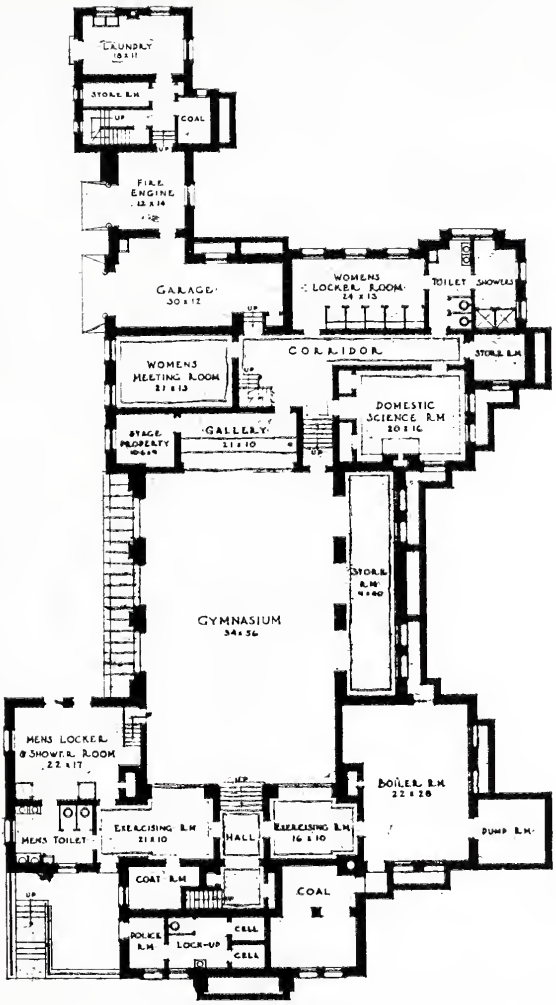
Another fact, not without force in its argument for the community house, is that by the creation of such buildings in communities where special demands are to be made upon them (and each community has its own special problems) the danger of a stereotyped memorial is lessened.

In considering community buildings a primary distinction must be made between those which are to be erected in smaller communities and those which will be placed in great cities. Community houses, depending for much of their effectiveness upon a close personal interest on the part of all instrumental in their erection and functioning, presuppose a closer bond of interest between their supporters than would be possible for one such building in a metropolis to inspire. Hence, in large cities community houses will largely take the form of neighborhood houses supported by a group of interested persons living within a small radius; where the whole city wishes to participate in one memorial building it is apt to be developed into a great community auditorium or stadium of a size proportioned to the number of people destined to use it.

This first paper will be devoted, therefore, to those problems which arise in connection with community houses located in towns of such size that one modest building will serve the purposes of a gathering place for the whole community.

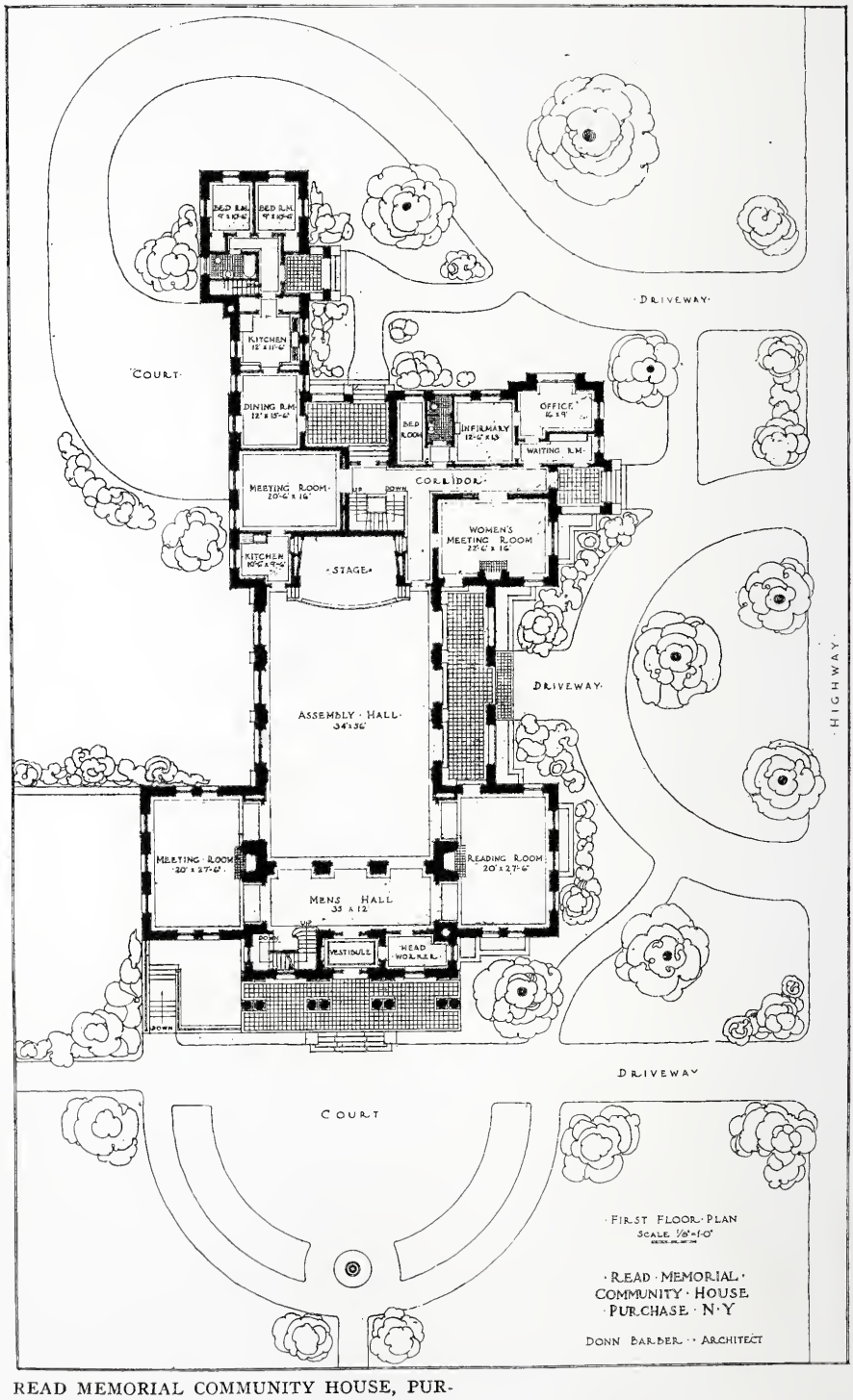
The most difficult problem confronting the architect of such buildings is that of the architectural style which shall characterize them. The two essential qualities to be expressed in their design, esthetically speaking, seem diametrically opposed when interpreted in the light of historic architectural design—informality and commemorative character. The one point which these two may hold in common is simplicity, a simplicity which shall heighten the inviting aspect of the house, which shall draw people to it rather than repel them and at the same time preserve the genuine dignity which is essential to any memorial building. This means a complete freedom from the suggestion of Roman triumphs or the splendors of Renaissance courts, and one can find no better foundation for stylistic character than the local types which America developed in the first two centuries of her history. By a recognition of the beauty and flexibility of the architectural forms evolved in Colonial America, and an appreciation of the approach which the early American architects made toward their problems, a truly American basis will be laid for a memorial architecture equal to the opportunity for which it is created.

The success of the community house depends almost exclusively upon the functions which it performs. In each community the needs are different; in so far as the unmet demands of the com-

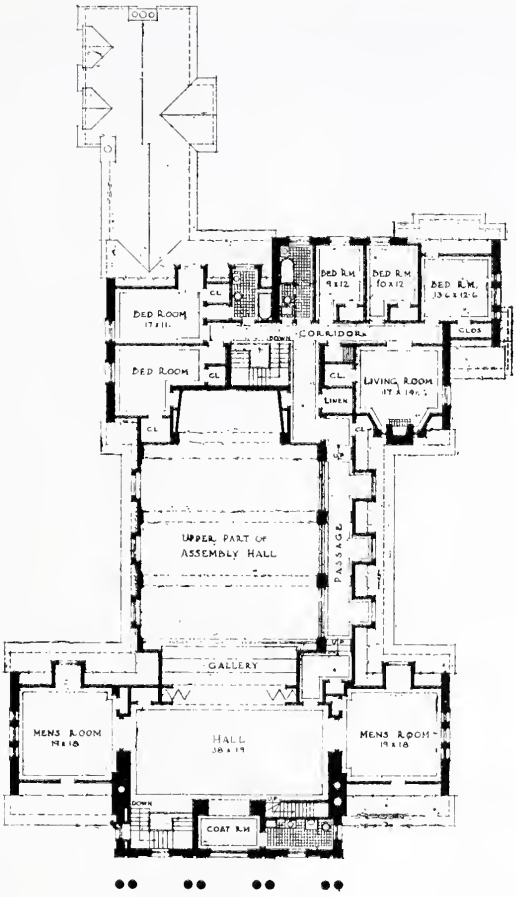


BASEMENT · PLAN ·
SCALE 1/8"-1'-0"

READ MEMORIAL COMMUNITY HOUSE, PURCHASE, N. Y., DONN BARBER, ARCHITECT.

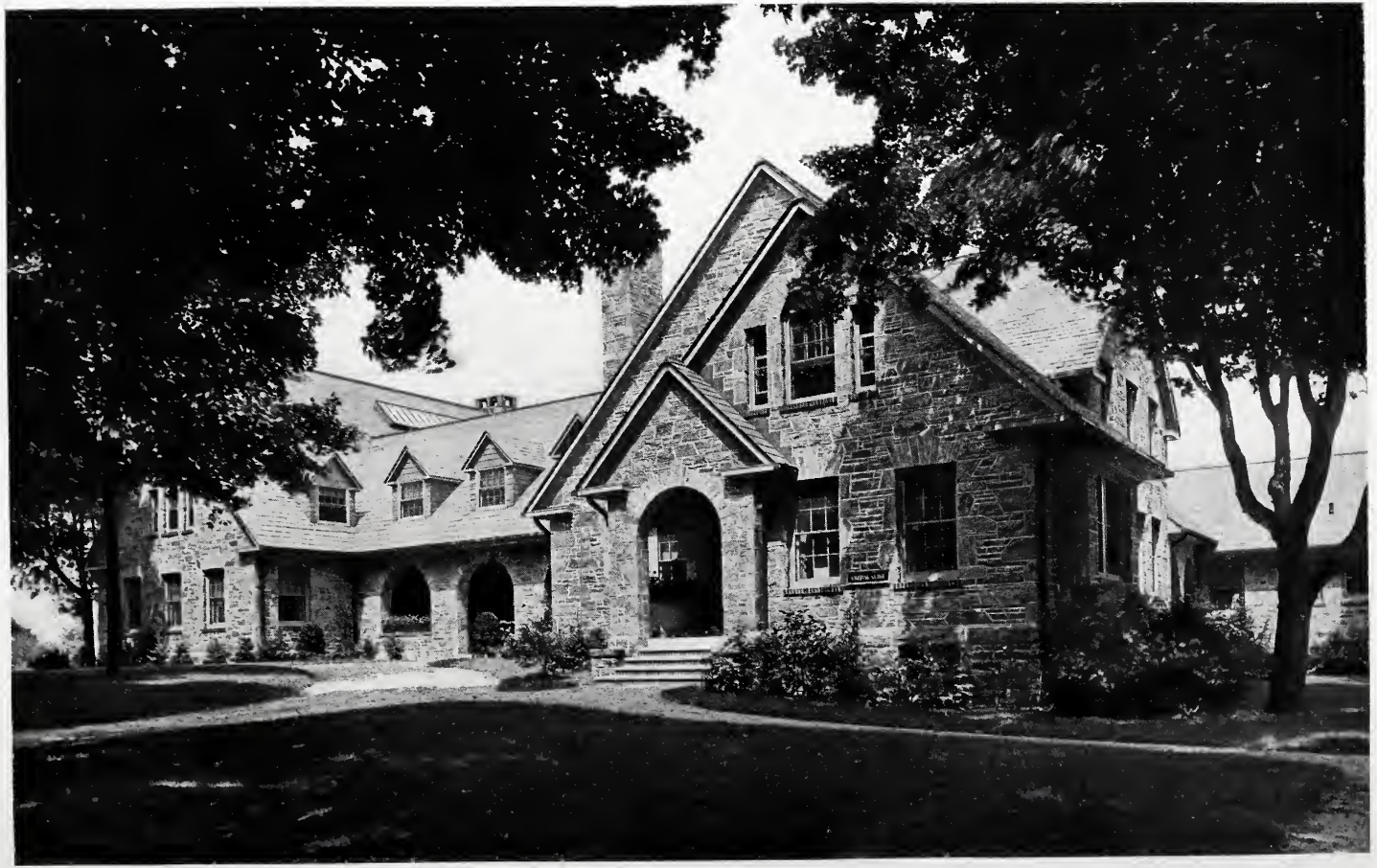


READ MEMORIAL COMMUNITY HOUSE, PURCHASE, N. Y. DONN BARBER, ARCHITECT.



SECOND · FLOOR · PLAN ·
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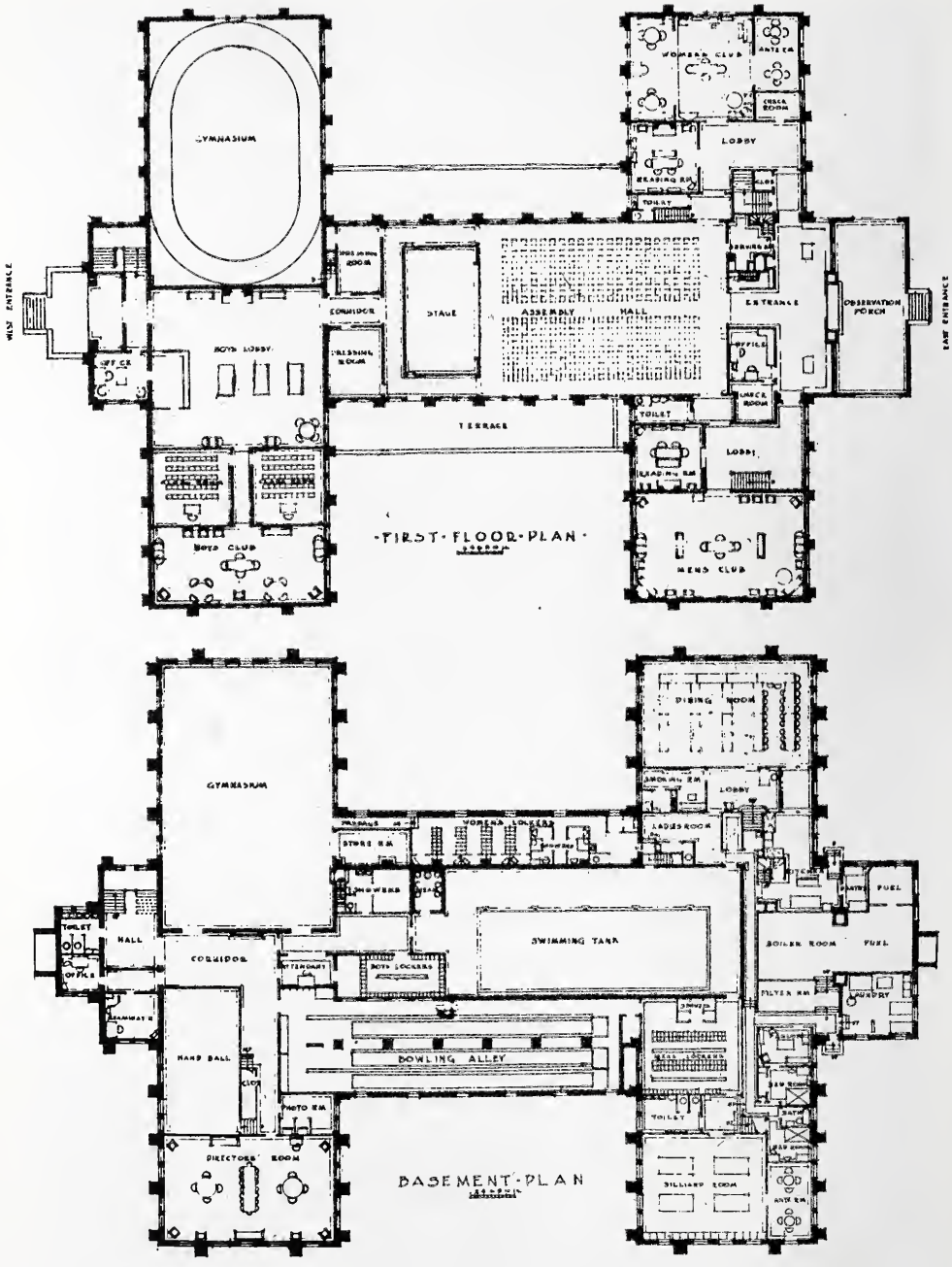
READ MEMORIAL COMMUNITY HOUSE, PURCHASE, N. Y. DONN BARBER, ARCHITECT.



READ MEMORIAL COMMUNITY HOUSE, PURCHASE, N. Y. DONN BARBER, ARCHITECT.



READ MEMORIAL COMMUNITY HOUSE, PURCHASE, N. Y. DONN BARBER, ARCHITECT.



CLUB BUILDING, MORGAN PARK, DULUTH, MINN. DEAN & DEAN, ARCHITECTS.

munity are met in the new building, to that extent success is assured. Most important, then, at the outset is some form of survey to ascertain the nature of the social and recreational needs of the community and to what extent these needs are served by existing institutions. In most cases it would be a mistake to duplicate such facilities unless those already established are restricted to the use of a limited group. The result of such a survey, whether by the architect or by the memorial committee, is elementary in determining the layout of the grounds and building as well as determining their location.



CLUB BUILDING, MORGAN PARK, DULUTH, MINN.
Dean & Dean, Architects.

The purpose of the community house is the establishment of a center to serve as a general meeting place for the community, with facilities which will render it a clearing-house for civic, educational and recreational activities. The smaller the community the fewer are apt to be the organized resorts of amusement and gathering places for public intercourse. Hence, in these smaller communities, whose actual needs are much greater than are adequately met, the contemplated building must incorporate within itself a varied and complicated organism. It may, in addition to its social and recreational equipment, well make itself the headquarters of organizations which are unable to maintain separate buildings, such as the Y. M. C. A., Y. W. C. A., chamber of commerce, tradesmen's organizations, charity organizations, American Legion and other similar groups.

There will, of course, be spacious lounging-rooms, where all who use the building will be tempted to linger. There will be rooms for billiards and pool, a gymnasium and a swimming pool, bowling alleys, card and game rooms, and above all a roomy auditorium for lectures, motion pictures, community drama, and the local forum, the presence of each of which will depend upon what similar facilities are already provided in the neighborhood.

The house may also serve the uses of a town hall, in which public meetings may be held and which would be the headquarters of municipal authority.

Of particular interest is the suggestion for making these buildings the art center of the town. One or more of the larger rooms could be so designed as to make a suitable exhibition gallery for traveling exhibitions of painting, sculpture or handicraft. Not only the plastic arts could be forwarded in this way, but community drama would find a perma nent home and musical recitals take a large share in the yearly program.

This idea of making the building the art center of the town cannot be overemphasized, for with organizations such as the American Federation of Arts, the Art Alliance and the great museums and libraries sending out numbers of travel-

ing exhibitions and lending lantern slides with lectures written to accompany them, there is no reason why the great chain of these houses should not bind the country into one effort to appreciate art and raise the standard of taste.

So many activities present their claims upon these buildings that the necessity of some such survey as was referred to above seems doubly insistent, in order to avoid duplication of activities; the vision of genially lighted houses, thronged with people, some at play, others enjoying music or the drama, still others meeting at round table discussion of local or national topics, is a vivid and stirring picture.

From a consideration of a number of buildings erected for the purpose of which we have spoken, some idea may be formed of just what elements enter into their arrangement and how, in particular cases, improvements may be wrought in the direction of greater efficiency.

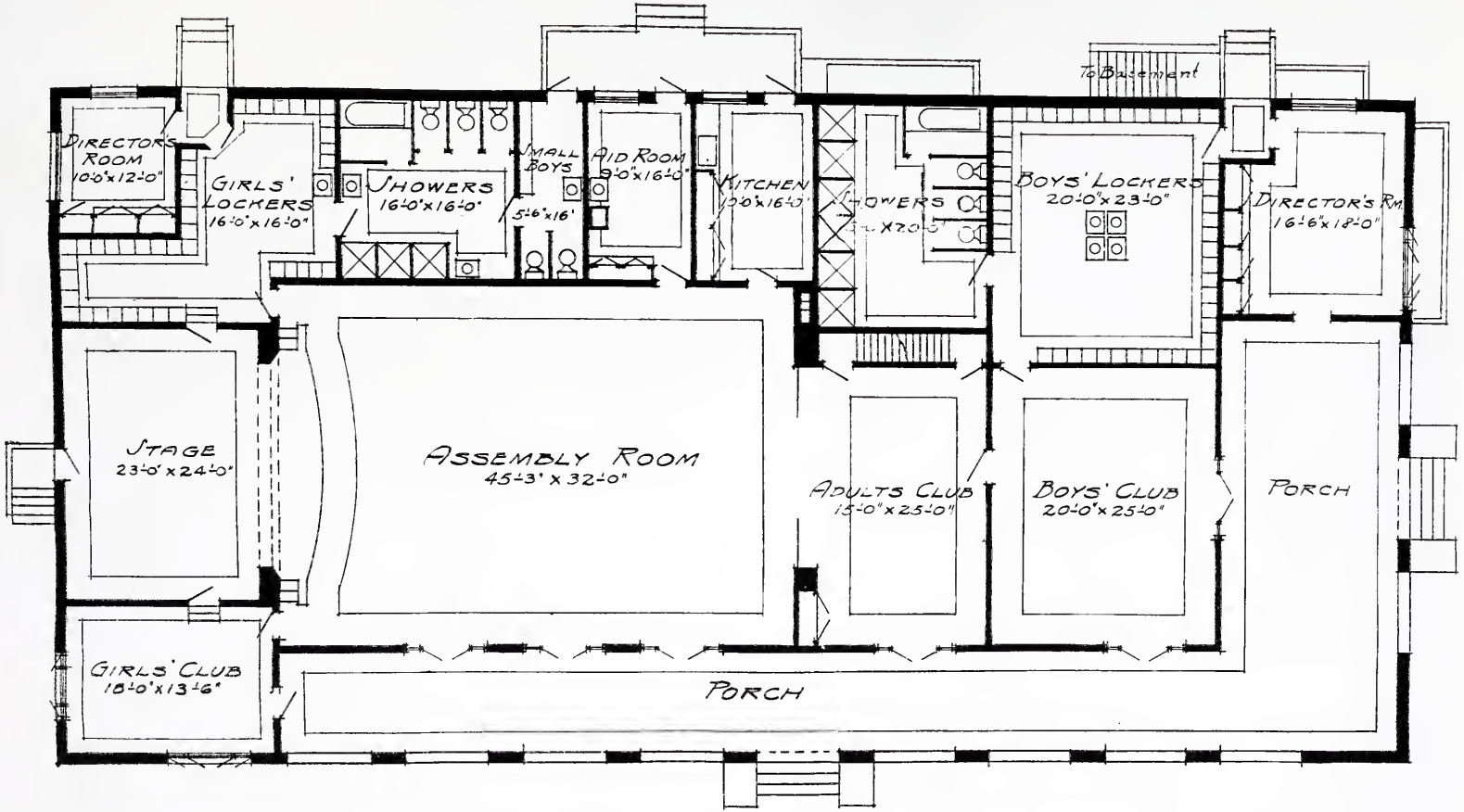
The Read Memorial Community House, Purchase, N. Y., in its plan is a solution of a problem set by one of the smaller communities. The central mass of the building is occupied by an assembly hall, which serves at once to separate two portions of the building whose uses are not interdependent. The front portion, in the ordinary usage of the rooms, is given over to men, while at the opposite end are rooms devoted to girls' and women's activities.

The main entrance leads into a foyer or hall, which acts as the main circulation for the adjacent portion of the building and also as lobby for the assembly hall. From it open rooms for meetings and lounging rooms for men. Immediately below are the men's gymnasium dependencies — toilets, locker rooms, exercising rooms and a coat room. The gymnasium room, which occupies the space beneath the assembly hall, is directly accessible from here. On the second floor are men's game rooms, with coat rooms and toilets.

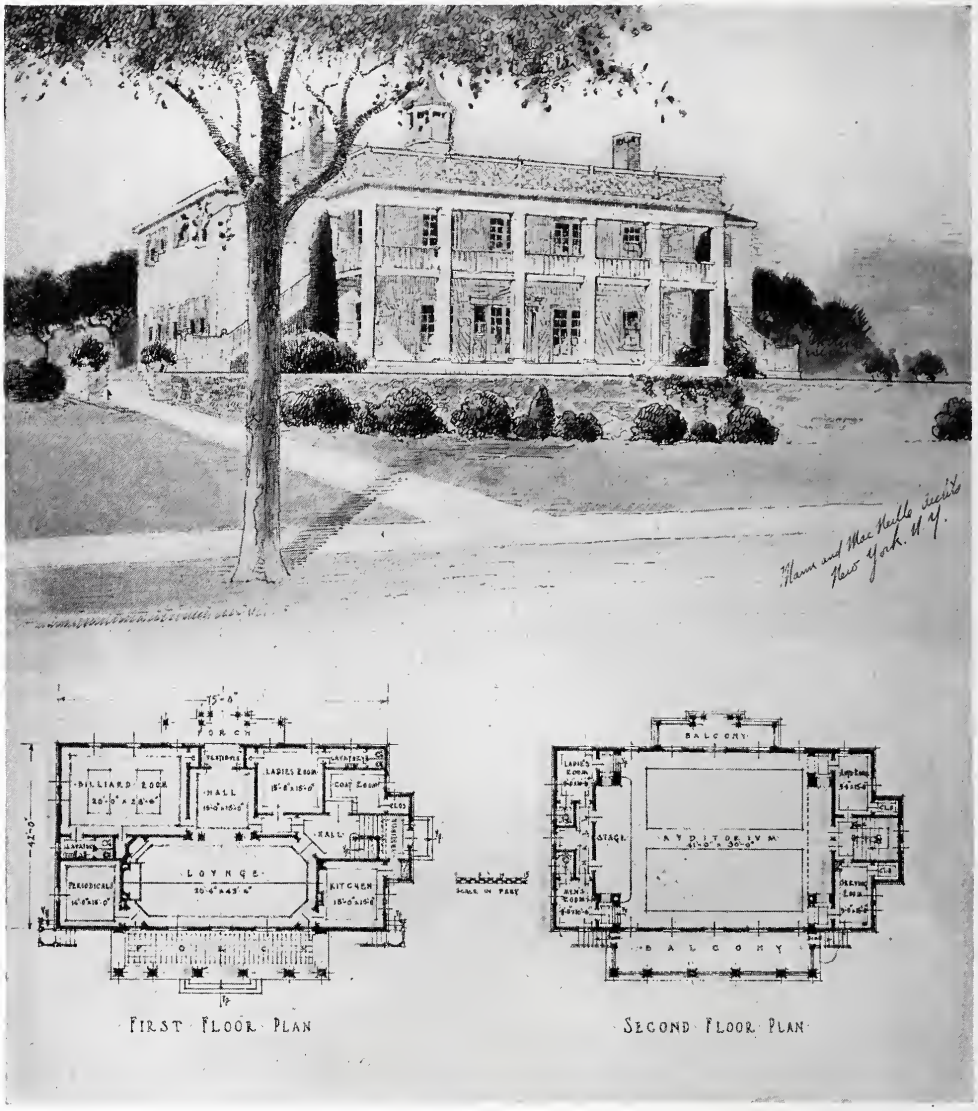


SCRIPPS PLAYGROUND BUILDING, LA JOLLA, CAL.
Irving J. & Louis J. Gill, Architects.

The women's portion at the far end of the building contains meeting rooms, a complete suite for the resident Red Cross worker, including a small infirmary and convenient living arrangements. Through the special entrance to this portion of the building direct access is had to the basement immediately below it, where are the gymnasium dependencies for the women, with an entrance to the gymnasium. One good-sized room is devoted to domestic science, and an entrance is made into the garage where the motor car of the Red Cross worker is kept. The second floor is devoted to bedrooms and living room for residents or helpers or class rooms and studios for the activities which will enter into the life of the building. The arrangements about the stage of the assembly room seem inadequate for dramatic productions. Comfortable dressing rooms at either side and more space for passage at the



SCRIPPS PLAYGROUND BUILDING, LA JOLLA, CAL. IRVING J. & LOUIS J. GILL, ARCHITECTS.



COMMUNITY HOUSE FOR GOVERNMENT HOUSING PROJECT,
PERRYVILLE, MD. MANN & McNEILLE, ARCHITECTS.



MEMORIAL TOWN HALL, TEWKESBURY, MASS.
Kilham & Hopkins, Architects.

rear should have been provided and a larger proscenium would be an error on the safe side.

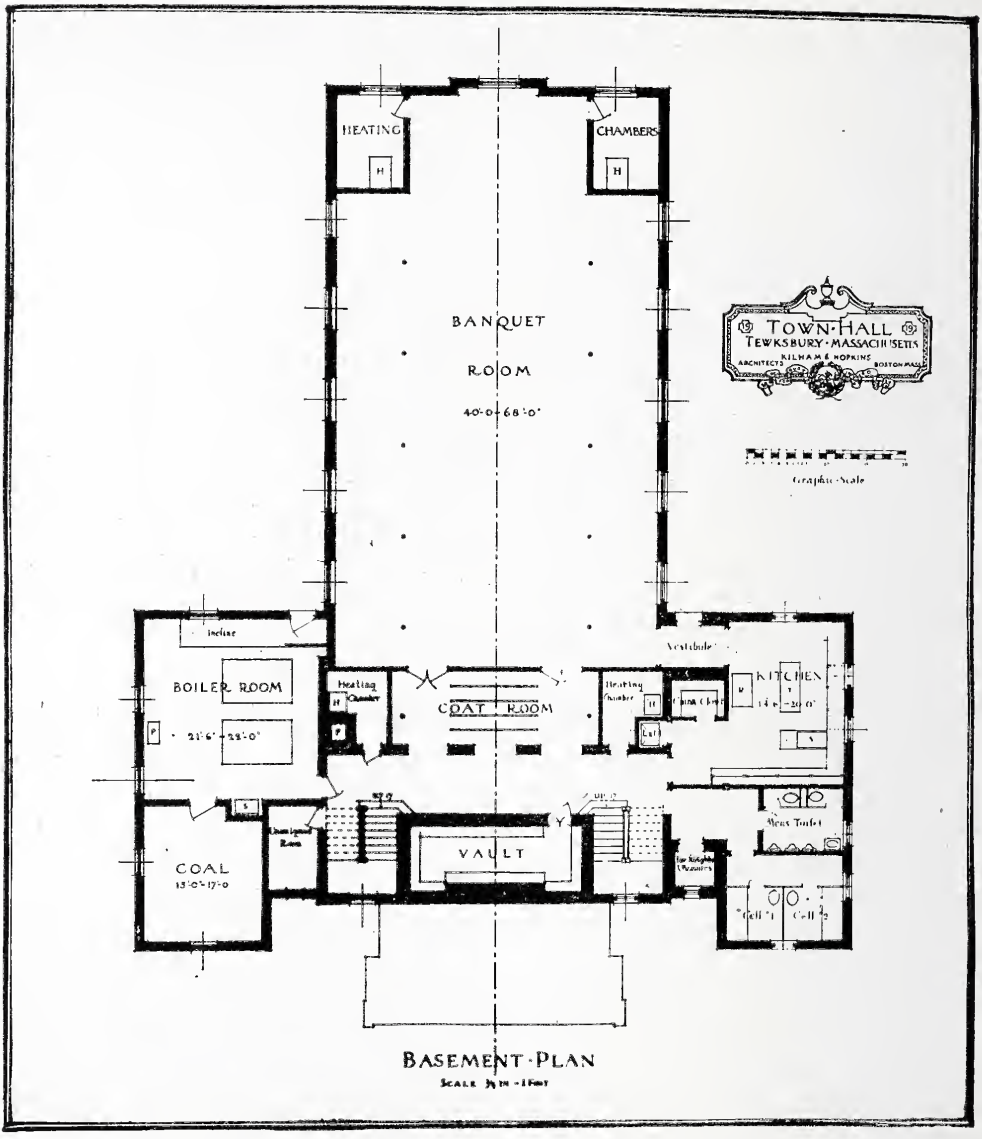
The house opens up especially well for general entertainments; and for recitals of music or dramatic reading, for lectures or moving pictures, the assembly room could not be bettered. If, however, this room should ever be called upon for art exhibitions, the present fenestration would offer an insurmountable difficulty.

Some necessary adjuncts of the town hall are also incorporated in the basement. A small police room with jail and cells is advantageously placed near the front, while at the rear a space is reserved for the fire engine.

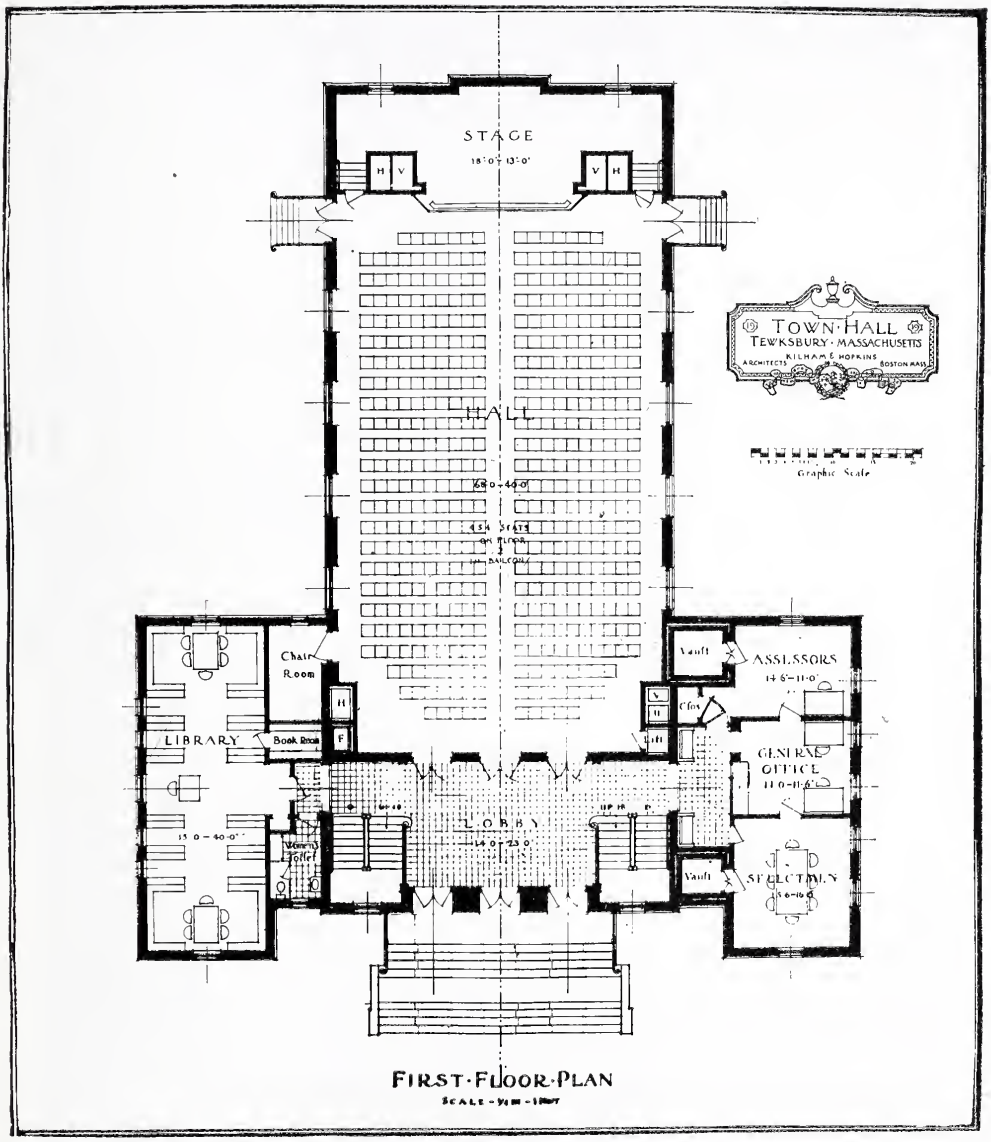
Altogether, this building forms as complete an entity for a special purpose as could be desired. The portions for men and women are separate, yet susceptible of being joined in the circulation upon occasion. The exterior is informal yet dignified and in keeping with local traditions in style and material.

A treatment not dissimilar from that of the Read Memorial has been accorded to the club building in Morgan Park, Minnesota. The differences noted between the two serve to show the variations in requirements, sometimes slight, which arise through local contingency. In the Morgan Park building, as in the Read Memorial, are found a large assembly hall, clubrooms for men and women, game rooms and gymnasium. In addition, the basement of the building contains a swimming pool and three bowling alleys. There are a special club room, lounge and locker room for boys at the opposite end of the building, away from the portion given over to adults. In connection with both these houses are community gardens and space reserved for outdoor recreations.

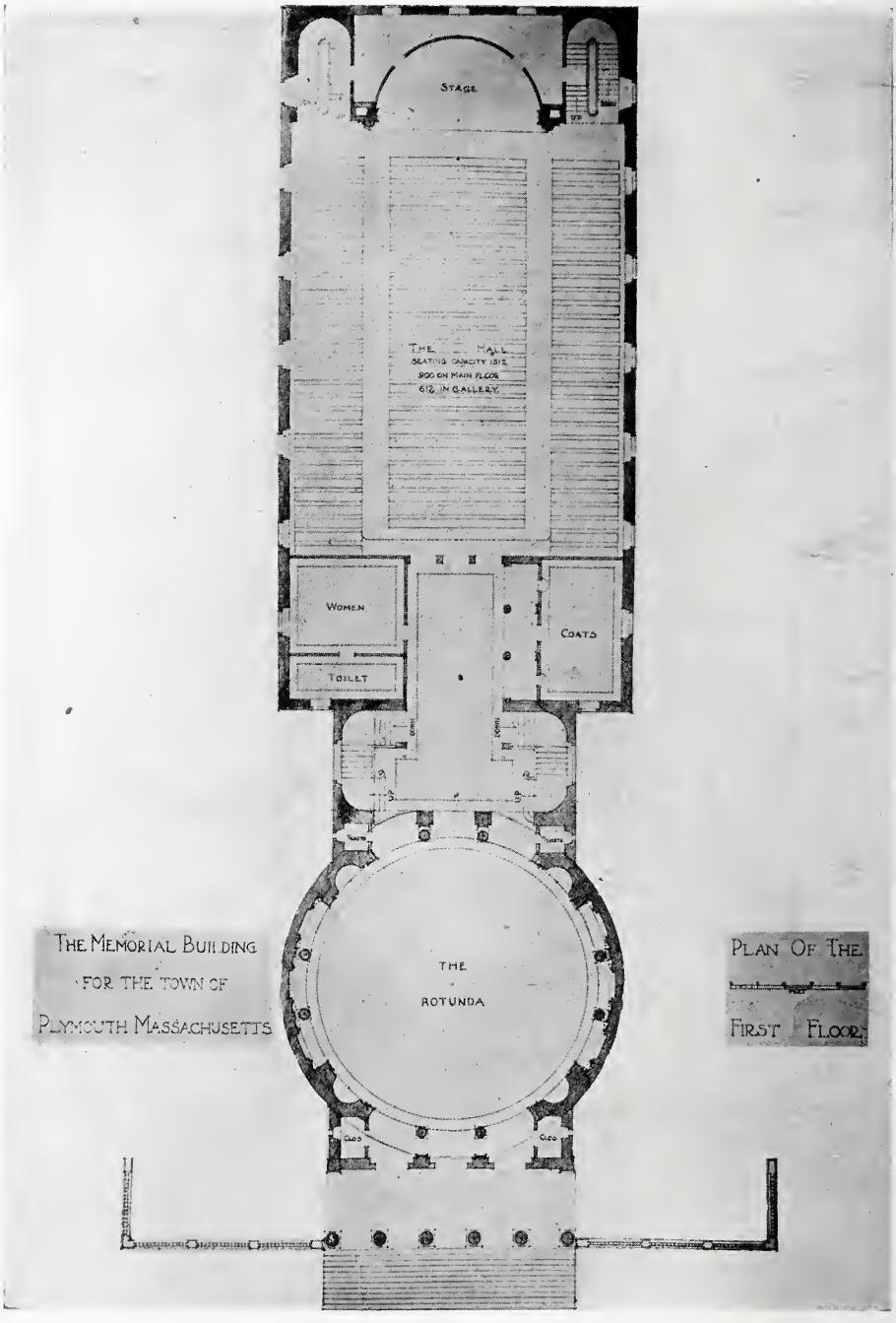
The behind-the-stage arrangements of the Morgan Park Club are very satisfactory. Two large dressing rooms open on to a corridor which surrounds the stage and access to and from it is simplified and uncrowded. The fenestration in this assembly hall leaves no wall space for exhibitions of pictures, but the club rooms for men and women are so spacious and well fenestrated as to make possible their use for this purpose. The adoption of clerestory lighting in such



MEMORIAL TOWN HALL, TEWKESBURY, MASS. KILHAM & HOPKINS, ARCHITECTS.



MEMORIAL TOWN HALL, TEWKESBURY, MASS. KILHAM & HOPKINS, ARCHITECTS.



WINNING DESIGN IN A COMPETITION FOR PROPOSED MEMORIAL COMMUNITY BUILDING AT PLYMOUTH, MASS. LITTLE & RUSSELL, ARCHITECTS.



WINNING DESIGN IN A COMPETITION FOR PROPOSED MEMORIAL COMMUNITY BUILDING AT PLYMOUTH, MASS.
Little & Russell, Architects.

assembly halls is a simple solution which would permit their use as exhibition galleries, but to gain this a sacrifice must be made of much pleasant access to the outdoor terraces or loggias adjoining.

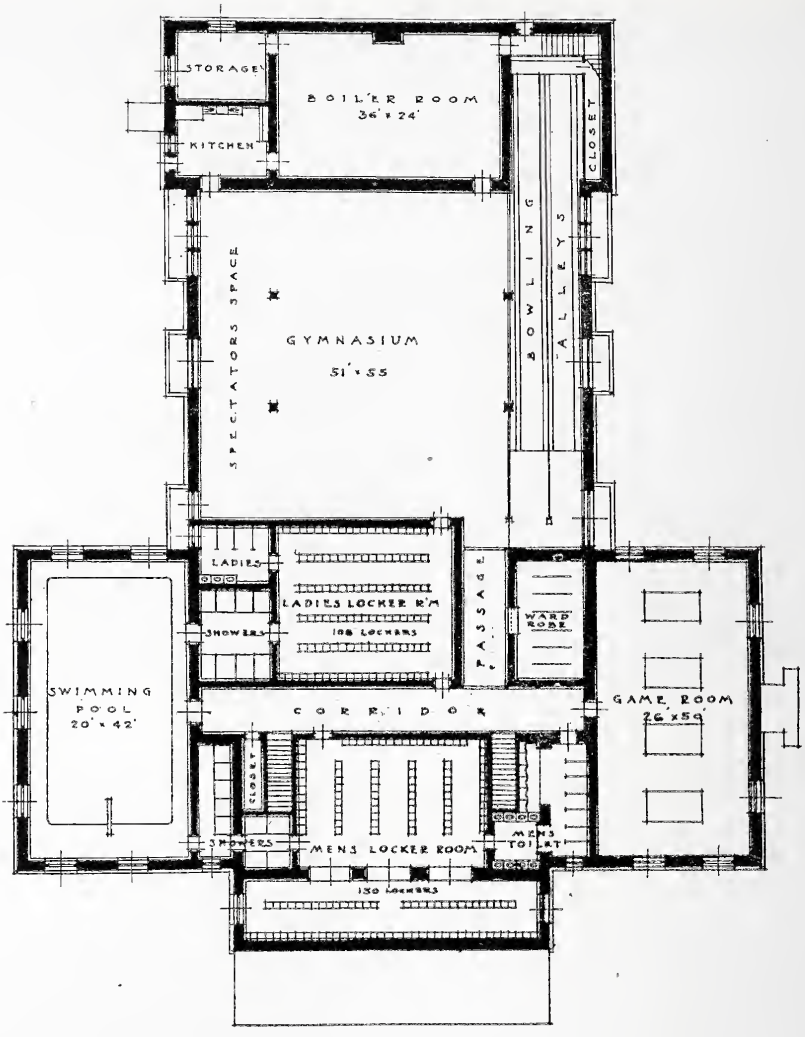
The La Jolla Community House in San Diego, California, built some years ago and functioning with much success, is of still the same type as the two foregoing buildings. Erected in connection with a large playground, its chief innovation is the location of the locker rooms on the first floor, with direct access to the outdoor playground. Its other elements are not unusual, but the simplicity and straightforwardness of its plan have contributed much to its usefulness.

The Community House at Perryville, Maryland, is of particular significance in that it forms an important part of a Government housing project. Its arrangement is highly convenient and a well studied piece of planning; the stage dependencies are quite ideal, although the stage itself seems almost too narrow for general use.

In the Tewkesbury Town Hall some features of a community house are present. The main lobby is the central circulation, from which open the assembly room, with a seating capacity of about six hundred; a library and reading room to the left and the offices of the town officials to the right. In the basement is a large banqueting hall and kitchen, the latter connected by a lift with the floor above if need of its service there should arise.

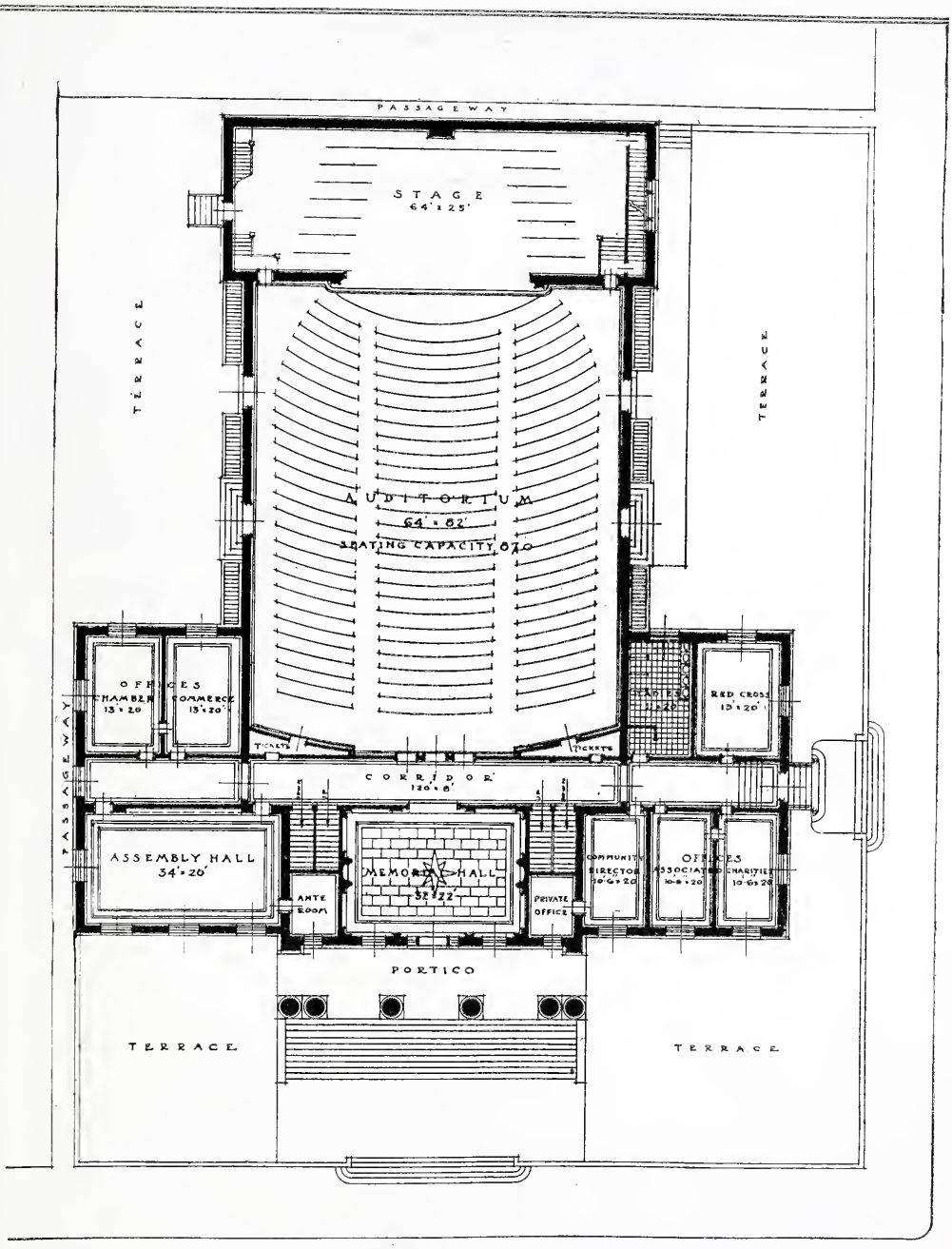
The two proposed memorial buildings which are the last on our list, one at Plymouth, Massachusetts, the other at Goldsboro, North Carolina, are a somewhat different departure. In both of these special emphasis is laid upon the large auditorium, whose lobby forms a memorial hall in which the war memorial element is featured. The Goldsboro building has very well arranged community facilities, both as a center for civic work and for recreational activity.

The treatment of the rotunda in the Plymouth building offers a splendid op-



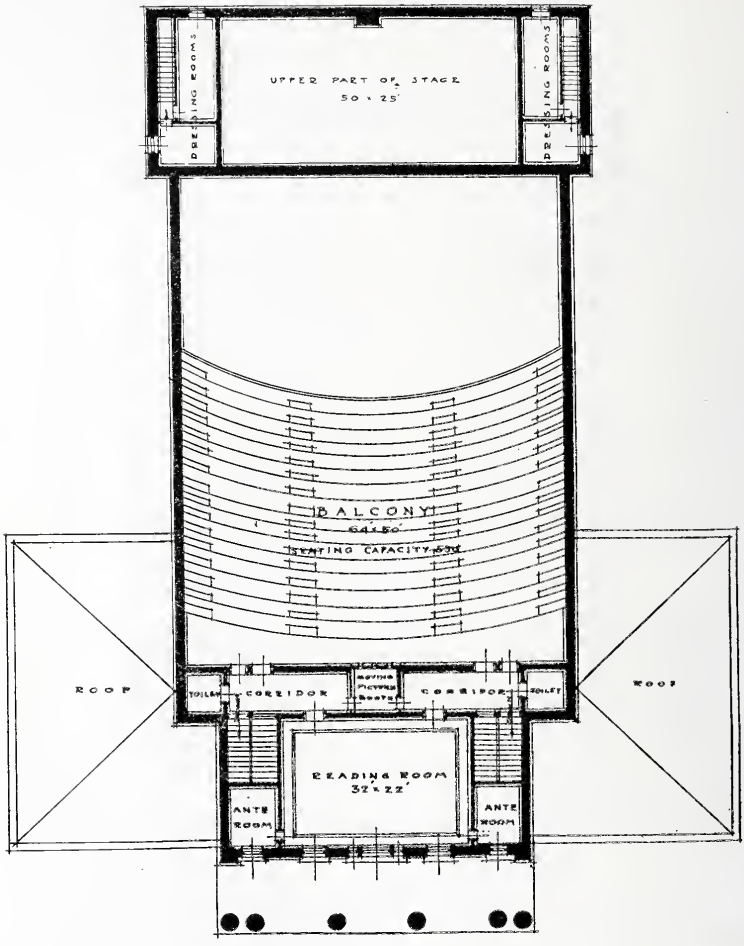
BASEMENT PLAN
SCALE

MEMORIAL COMMUNITY BUILDING, GOLDS BORO, N. C. C. ADRIAN CASNER, ARCHITECT.



MAIN FLOOR PLAN
SCALE 0 4 8

MEMORIAL COMMUNITY BUILDING, GOLDSBORO, N. C. C. ADRIAN CASNER, ARCHITECT.



SECOND FLOOR PLAN
SCALE 0 4 8

MEMORIAL COMMUNITY BUILDING, GOLDSBORO, N. C. C. ADRIAN CASNER, ARCHITECT.



MEMORIAL COMMUNITY BUILDING, GOLDSBORO, N. C.
C. Adrian Casner, Architect.

portunity for a dignified and effective memorial hall where flags and trophies of war may be exhibited and comemmorative tablets placed in fitting surroundings.

Many problems other than architectural arise in connection with community buildings. The form which the building is to take depends largely upon the result of the survey of existing local conditions, and with this situation the architect must be thoroughly familiar. The question of its ownership and management, with that of the financing, are matters to be decided by the memorial committee, but in which the architect's advice may be valuable.

Useful as these buildings must and do prove themselves to be in towns and small cities of closely knit population, of equal value is their contribution to country districts with a widely scattered residence. We are all familiar with the spirit of co-operation and the willingness to "get together" exhibited in rural communities when the call goes forth for support of church and grange activities. What could better fulfil the purpose in such localities of drawing together in a co-operative interest the efforts of these organizations than a building where the large assembly hall could be utilized by each and all for entertainment or instruction?

The idea of raising living memorials to the men who have died for a great ideal, memorials whose function it will be to keep alive that ideal and, holding it aloft, pass it on to generations to come, makes an appeal to all who feel that the causes of the conflicts of this war should never be forgotten. The difficulties and misunderstandings which arose between nations in the past are at present transforming themselves into difficulties and misunderstandings between classes, and no other purpose would be more eminently served by a memorial community building than the encouragement of a meeting of minds of all classes, united by the bonds of common interest created by a highly developed community spirit.

SOME PRINCIPLES OF SMALL HOUSE DESIGN



By John Taylor Boyd, Jr.

Part II - Design of the Plot of Land (continued)

THE variety of design of small house lots is endless. So long as plots of land vary in character and in size and shape, so long will new schemes be always developing; variety of treatment is forthcoming because of differing ideas and tastes among individual designers. We should cultivate this art with all zeal, for thus we may rescue American small house design from certain unfortunate tendencies. I mean that too many of our homes have no great individual charm and are without inspiration. They seem to be turned out too much of a pattern, mechanically designed and executed with commonplace details; or else they are, especially in the case of cheaper houses, crude and often vulgar in their striving for exaggerated effect.

It may be thought that too much is being made of the phrase "lot design," that it is used as a new term to describe what is, after all, only garden design, an art which is flourishing in all parts of the country. But it should be apparent that planning and planting gardens is only a subordinate part of the design of the whole lot. One may see well-desgined gardens on plots of land which—including the buildings—are poorly designed. Indeed, gardens often suffer from the same faults as houses. They are too often laid out as an afterthought with no attention paid to their coordination with the house or with other features on the grounds. A garden will never be entirely successful unless one designs it in strict, harmonious relationship to everything around it, particularly with respect to the house. Such are the elemental principles of the matter. As stated, they seem simple enough, and reasonable; yet they are usually overlooked in all the vast amount that is printed about gardens.

Although a book might be written on the art of sub-dividing small plots of land and on placing a house thereon, space will allow only a few more examples to be illustrated in these pages. The designs shown in this issue were chosen to bring out certain specific principles, either in emphasizing unusual features of space relationship or else in showing how unpromising, eccentric sites may be often made not only available, but strikingly desirable.

Among these the design of the Merriman place is another characteristic effect of Mr. Sibley C. Smith's. As in the design of the Rochester garden in the first article, he uses the same bold, geometrical patterns with extraordinary skill, in faultless, exquisite taste. A first glance at the plan makes it seem a little overdone, but the photos show this impression to be a false one, for, as executed in the third dimension, utterly simple, harmonious details are revealed, in fine, quiet massing, softening the bold ideas

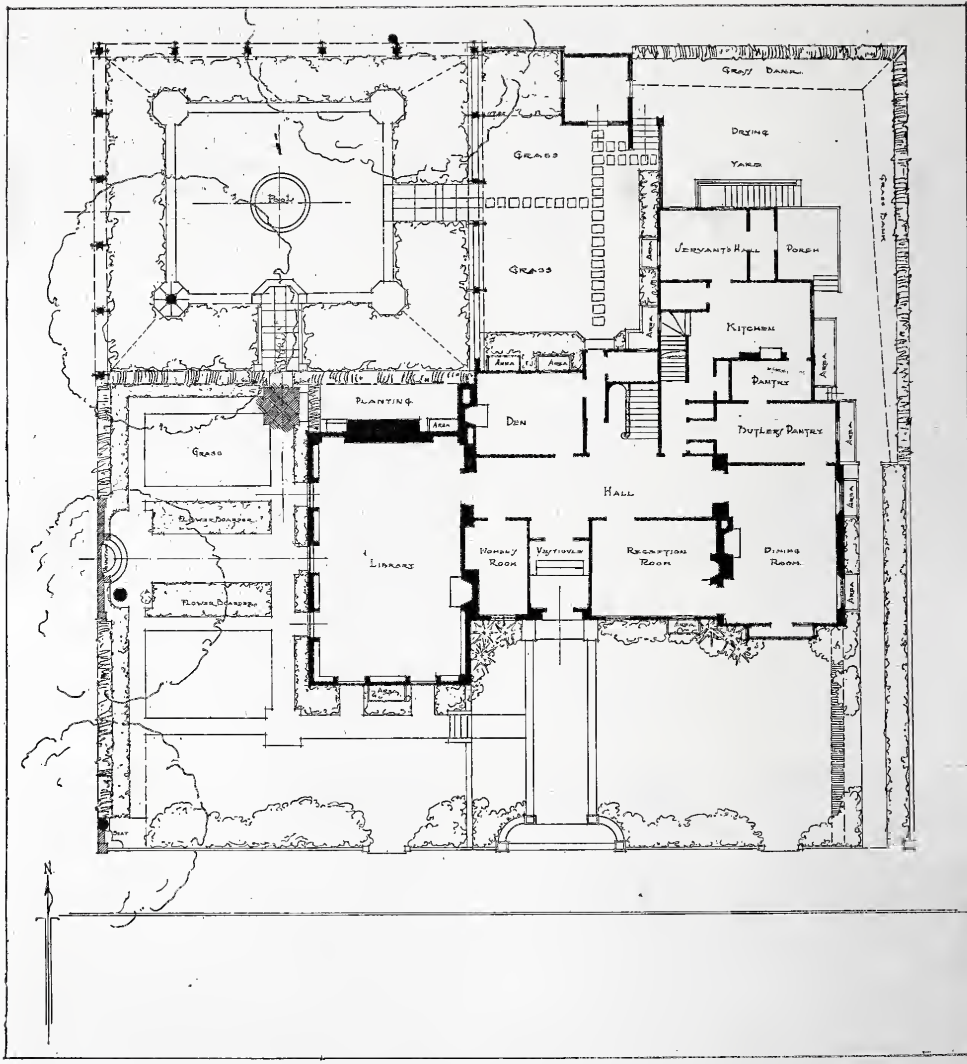
of the plan. Such combination of imagination and control entitle this design to be called a masterpiece. Incidentally, a word should be said for the fine quality of the house itself, to point out how well it plays its part with the foliage of the garden. It, too, is a decisive design, its simple lines and broad wall spaces, with exquisitely proportioned door and window openings—all combined to stand as a strong foil to the gardens with their massed planting. Its light, well textured walls are fine surfaces for the play of light and shade and color of the foliage.

A point of particular interest about the Merriman house is that it illustrates a problem often met with, one difficult to handle: that is, a larger house, set in a small lot. One may notice how wonderfully well planned is the house for large entertainments. And how well Mr. Smith's design carries out the spirit of the house in this. The arrangement of house and grounds together would easily provide for scores of people *en fête,* inviting groups to assemble and to circulate, and individuals to draw apart in little gatherings. It is well to remember this feature of the Merriman design, for it offers splendid suggestions for that semi-domestic type of building which is every day coming more and more into use in American life: that is the recreational centre—whether community building, town or country club, Y. M. C. A., parish or church houses. These are buildings on a generous scale, designed principally for recreation and foregathering, expensive to erect, often with but a little land around them that might be made vastly useful at small cost, thus doubling the facilities of the building in good weather.

So far, most of the designs presented in these two articles have been highly elaborated ones, designs in which every square foot of ground was used to the full. There are, however, cases in which such highly organized design will not do, either by reason of practical difficulties, or as a matter of personal taste. The two designs of Mellor and Meigs, of Philadelphia, are of this type. It is



FRONT—RESIDENCE OF E. B. MERRIMAN, ESQ., PROVIDENCE, R. I.
Sibley C. Smith, Landscape Architect.



BLOCK PLAN — RESIDENCE OF E. B. MERRIMAN, ESQ., PROVIDENCE, R. I. SIBLEY C. SMITH, LANDSCAPE ARCHITECT.

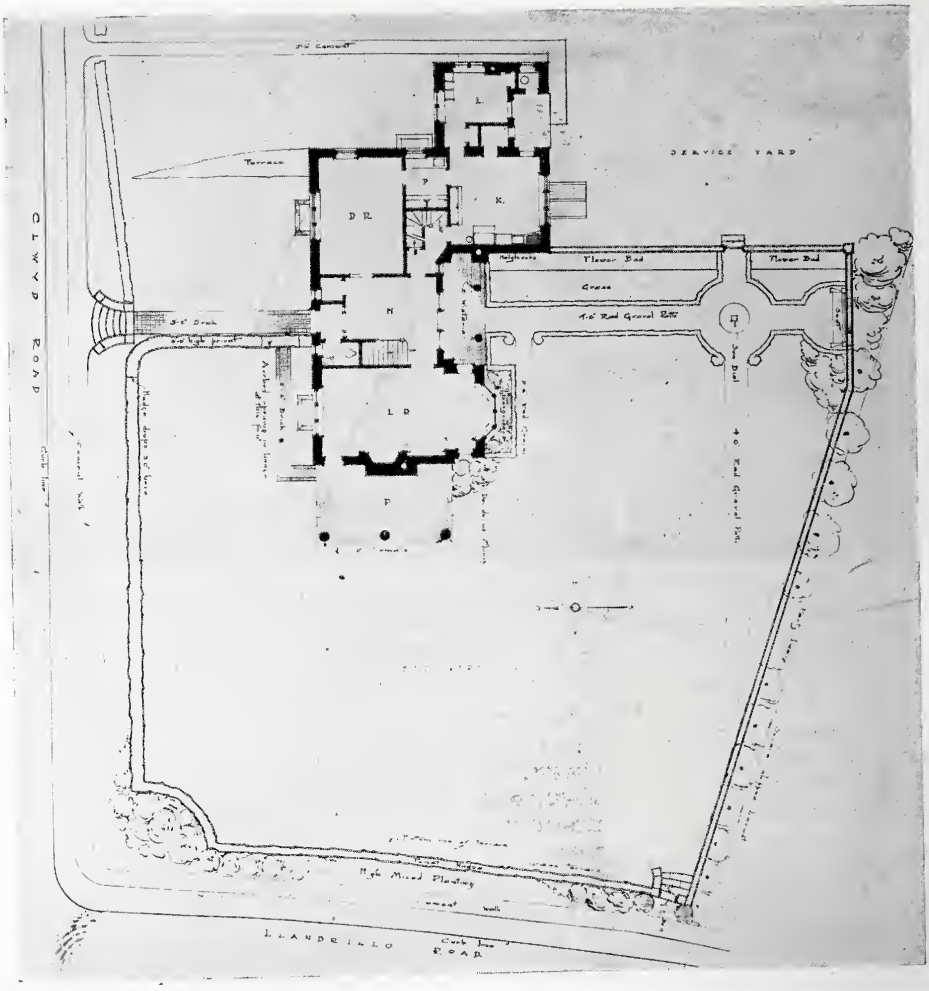


GARDEN IN REAR OF HOUSE—RESIDENCE OF E. B. MERRIMAN, ESQ., PROVIDENCE, R. I.
Sibley C. Smith, Landscape Architect.

to Philadelphia that we must go for the best, all-round, wholesome house architecture in this country. Whatever be our local pride or prejudice, the most consistently beautiful groups of small houses we shall find there. The two designs in these pages are characteristically Philadelphian. The one at Cynwyd is the simplest. Both of them evidence the local fondness for planting along the lot boundaries, leaving broad greensward spaces and less planting about the dwelling. However, it should be observed that the photographs show some trees



GARDEN OFF LIBRARY—RESIDENCE OF E. B. MERRIMAN, ESQ., PROVIDENCE, R. I.
Sibley C. Smith, Landscape Architect.



BLOCK PLAN—HOUSE AT CYNWYD, PA. MELLOR & MEIGS, ARCHITECTS.

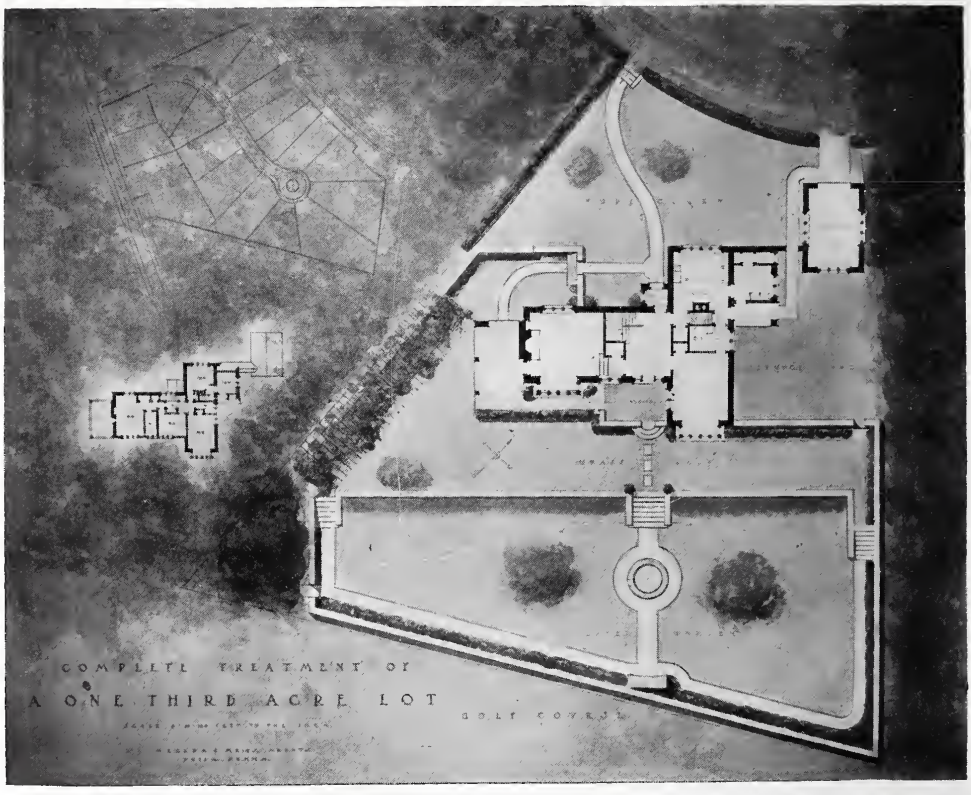


ENTRANCE—HOUSE AT CYNWYD, PA.



FRONT VIEW—HOUSE AT CYNWYD, PA.
Mellor & Meigs, Architects.

8



BLOCK PLAN—RESIDENCE OF LEONARD T. BEALE, ESQ., ST. DAVIDS, PA. MELLOR & MEIGS, ARCHITECTS.

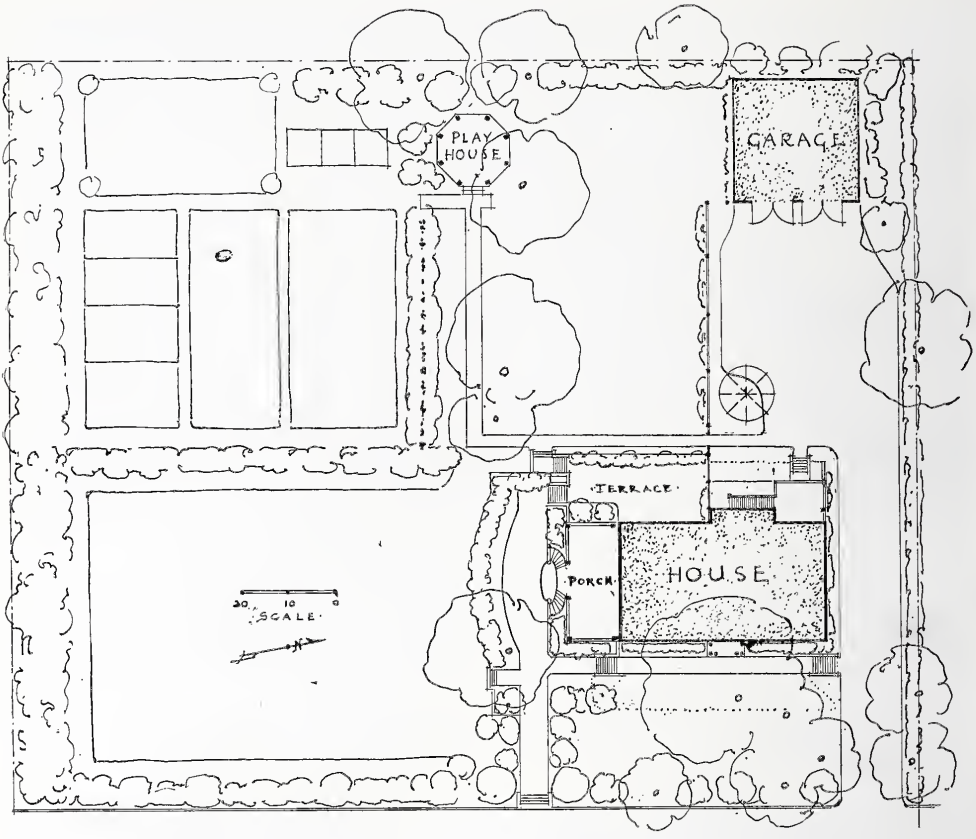


VIEW FROM EAST—RESIDENCE OF LEONARD T. BEALE, ESQ., ST. DAVIDS, PA.
Mellor & Meigs, Arthitects.

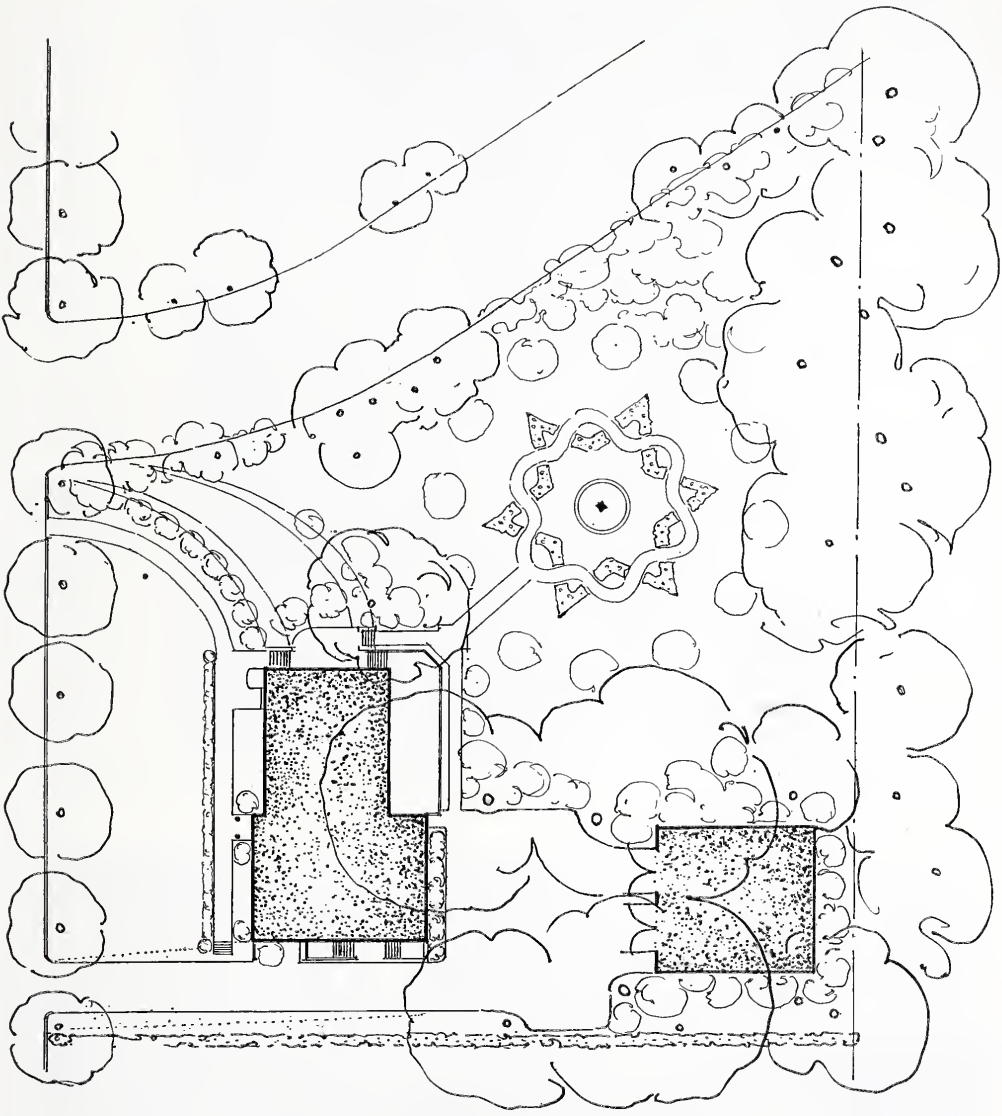
and shrubbery about the house that do not appear in the sketch plan, which thus make the schemes seem barer than they actually are. One should observe that, although these two schemes are less sub-divided than some of the preceding ones, they nevertheless follow just as strictly the principles of good plot design. The houses are accurately placed in just the best location, to a foot, and all the practical features of entrances, roadways and paths, service and drying yard, are just as carefully and artistically provided for; and, further, the spaces



GARDEN TERRACE—RESIDENCE OF LEONARD T. BEALE, ESQ., ST. DAVIDS, PA.
Mellor & Meigs, Arthitects.



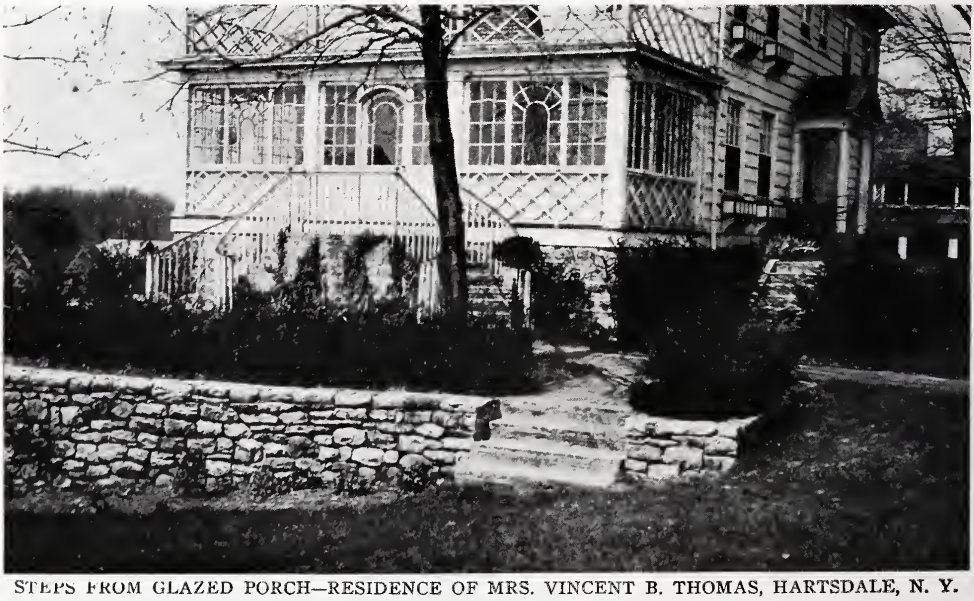
BLOCK PLAN—RESIDENCE OF CHARLES B. NICHOLSON, ESQ., HARTSDALE, N. Y. FRANK ARNOLD COLBY, ARCHITECT.



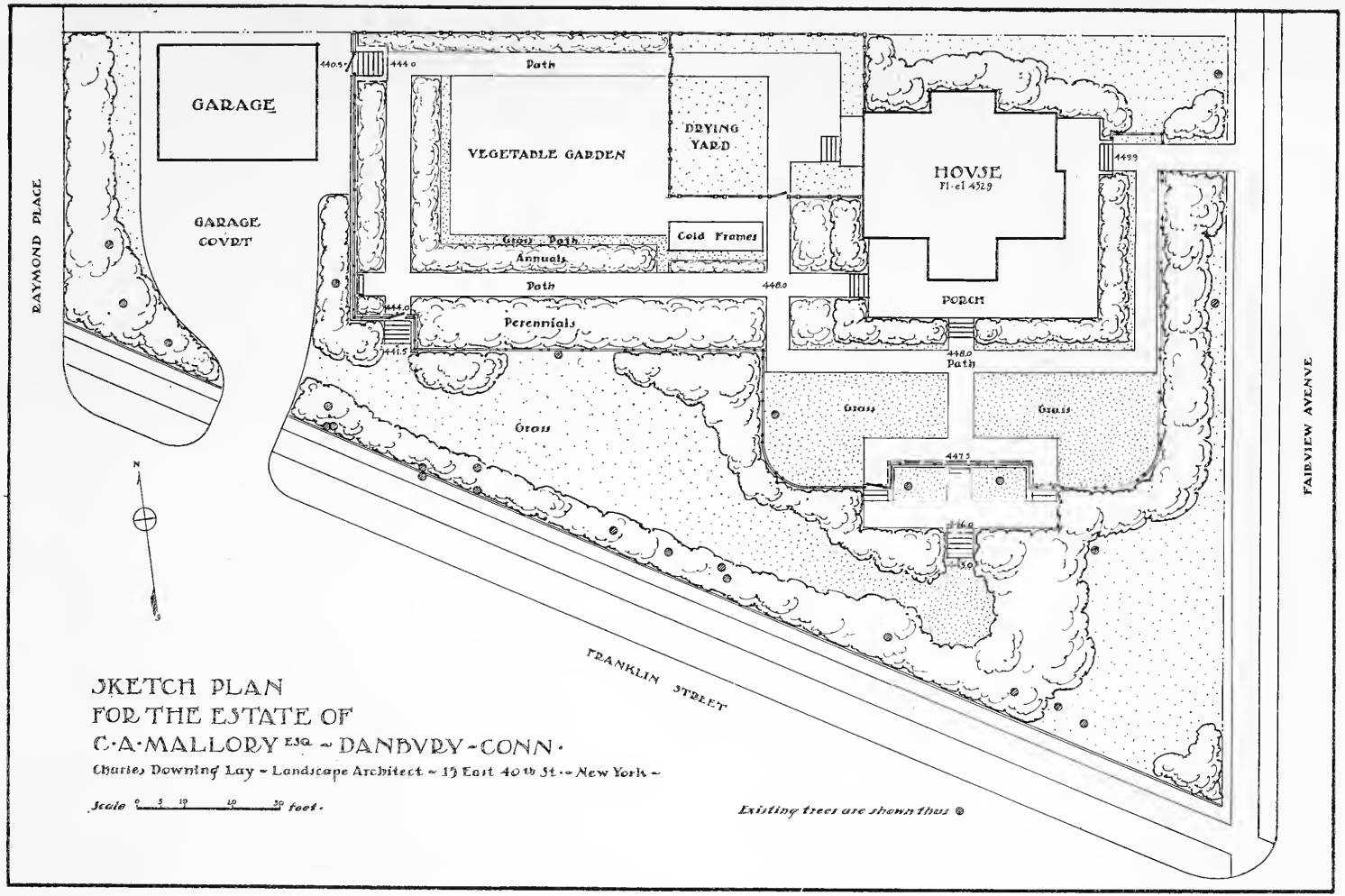
BLOCK PLAN—RESIDENCE OF MRS. VINCENT B. THOMAS, HARTSDALE, N. Y. FRANK ARNOLD COLBY, ARCHITECT.



TERRACE AT REAR—RESIDENCE OF MRS. VINCENT B. THOMAS, HARTSDALE, N. Y.
Frank Arnold Colby, Architect.



STEPS FROM GLAZED PORCH—RESIDENCE OF MRS. VINCENT B. THOMAS, HARTSDALE, N. Y.
Frank Arnold Colby, Architect.


GARAGE
GARAGE COURT
RAYMOND PLACE
VEGETABLE GARDEN
DRYING YARD
Path
Grass Path
Annuals
Cold Frames
Path
Perennials
Grass
HOUSE
Fl. el 452.9
PORCH
Path
Grass
Grass
FAIRVIEW AVENUE
FRANKLIN STREET
N
SKETCH PLAN
FOR THE ESTATE OF
C.A.MALLORY ESQ. ~ DANBURY-CONN.
Charles Downing Lay ~ Landscape Architect ~ 15 East 40th St. ~ New York ~
Scale 0 5 10 20 30 feet.
Existing trees are shown thus



VIEW TOWARDS GARAGE—RESIDENCE OF C. A. MALLORY, ESQ., DANBURY, CONN.
Charles Downing Lay, Landscape Architect.

are each marked off from the others by firmly established boundaries of wall or path or planting. Plenty of terrace space is provided. There is no looseness—and no loose ends—the proportions are perfect and beautiful. It will be noted how the garage is joined to the house in the St. David's place, thus aiding in the long, low, irregular grouping.

Mr. Frank A. Colby solved two hard problems in the two places at Hartsdale. The one, the Nicholson design, presents a house that had already been built before the architect was called in. Fortunately, it had been correctly located on the high part of the site, though a few feet too near the street. Behind it and beside it the ground falls rapidly away. Mr. Colby took advantage of this change of level by adding the glazed side porch, with rock steps winding down; and also building a rear, secluded terrace, somewhat lower, yet high enough also to overlook a broad, garden-like lawn. Together they afford a most attractive arrangement, effective in all respects. They rescue the design of the house by making it seem one with the land, for otherwise the building would poke up too much from the ground. The Thomas house design is a striking success on an unpromising plot of land—a site small, overexposed on two roads, crowding into a narrow corner on the main road, with an undesirable slope down from the sidewalk. The designer did not hesitate to place the house in this location along the front. He screened the side road off by planting and by the odd, curving terraces, seen on the plan. But the most skillful touch of all is in the position of the little entrance path leading from the sidewalk to the house. Had it led straight across the front lawn to the front door, it would have directed attention forcibly to the depression of this lawn below the sidewalk and thus have emphasized the sunken level of the house. But, by keeping the lawn unbroken, and carrying this entrance path at the one side, one is not allowed to realize that the house is somewhat below the level of the sidewalk. An original touch is the interesting shape of the star-shaped little garden, whimsically leading off from the corner of the porch. Odd, and original, but not at all out of place.

English Architectural Decoration

Text and Measured Drawings by Albert E. Bullock

Part XI.—Doorways and Fanlights

TOLSTOI attempted a definition of art in its various phases from a literary standpoint in his exhaustive volume, "What is Art?" Other writers have since described and illustrated the essentials of certain branches of the several crafts which exhibit taste in the principles and proportions adopted to secure their respective ends.

In decorations for interiors many arts are employed to which it would not be possible to apply universal rules, as their boundaries are too elastic to be confined within definite limitations.

Art is either good or bad in proportion to the comparative value it attains with regard to the character of the accepted codes in each particular branch. Whether it be architecture, sculpture or painting, the art portrayed is the expression of the artist's experience after eliminating all he considers superfluous to the true delineation of his theme.

To Greek art is given the premier place in the history of the fine arts by virtue of the chastity of its expression and its idealistic qualities, as compared with former ancient examples of pagan art. To it subsequent artists invariably turned for inspiration, and from it range the avenues of all subsequent productions. The attainment of the ideal is the great problem ever foremost in the mind of the artist who seeks that his work may live after him, and holds the laurel wreath of greater value than immediate gain.

Ever striving after the goal of his ideal, one sees through the predilections of the individual artist the motive power of his genius. Inigo Jones, Wren, Grinling Gibbons, Chippendale, Adam, Wedgewood, Flaxman and a host of famous sculptors and painters, have each given us their several interpretations of this elusive subject. Each craftsman brings his personal inspirations into play, having by careful comparative survey of the works of his predecessors and confrères created a style or mode of production peculiar to his taste, and he presents these new features to the criticism of his contemporaries and to posterity. Posterity classifies these products into types and periods and heads them with the name of the most prominent members of the school of thought or originator of the particular mode of craftsmanship.

Naturally the styles of decoration which find most favor are those which are the more suitable for modern use and emulation. The styles which exhibit the most distinctive characteristics range from the early years of the seventeenth century, or the reign of Charles I, to the end of the eighteenth century during the reign of George III, although the first half of the eighteenth century saw a large amount of reproduction of the works of previous eras by the disciples of the school of the Earl of Burlington.

The Queen's House, Greenwich, built by Inigo Jones for Queen Henrietta Maria, wife of Charles I, is one of extremely refined and scholarly taste by that architect, based upon Palladian principles, and was followed by the building of Ashburnham House, Westminster, within the precincts of the Abbey, which is now occupied by Westminster School. This latter work is attributed to John Webb, kinsman and pupil of Inigo Jones, who was born in 1611; but it was undoubtedly chiefly designed by his master, who alone could be responsible for the conception of the exceptionally fine staircase which has served as a model for many subsequent productions. The library has a fine ceiling, with a bold chimneypiece, which has already been illustrated in these pages. The rear room

contains an alcove of some interest, with the wig room adjoining it. East of these rooms, near the large Tudor Hall, is the Busby Library, which is a later work, to which the carving to the stiles of the bookcases bear testimony, as well as the elaborate ceiling, which latter has a strong resemblance to the ceiling of the Church of King Charles-the-Martyr at Tunbridge Wells. The Wren period ceilings were of very bold character, as the instances given from Love Lane, City of London, and that of the New River Company's Offices, Rosebery Avenue, testify. During this period much fine work was executed in Scotland, chiefly by the Mylne family and Sir William Bruce. The latter built himself a house at Balcasky in 1665, and made alterations to Ham House, Richmond, in 1670, where the first sash or "guillotine" windows are reputed to have been used. In the following year he was associated with Robert Mylne in additions to Holyrood Palace, and doubtless undertook the work executed in 1675 at Drumlanrigg Castle. One of Bruce's later works is Kinross House, a famous Scottish residence, where considerable taste in the decoration is exhibited.

One of the best works of John Webb is the famous Tredegar Park, Monmouthshire, which he remodeled in the reign of Charles II. The staircase has a resemblance to that at Sudbury Hall, Derbyshire, and features similar to those at Thorp and Ramsbury. It was the spirit of the age, and quite in keeping with Webb's work, to have carved balustrading in place of the single turned bottle-shaped balusters which had preceded it, and which were subsequently revived in Wren's day. The carved staircase at Forde Abbey is well known to many who have visited that famous Somersetshire residence. Webb was attached to the pedimented type of door and many other smaller conceits which stamp an individuality to his work.

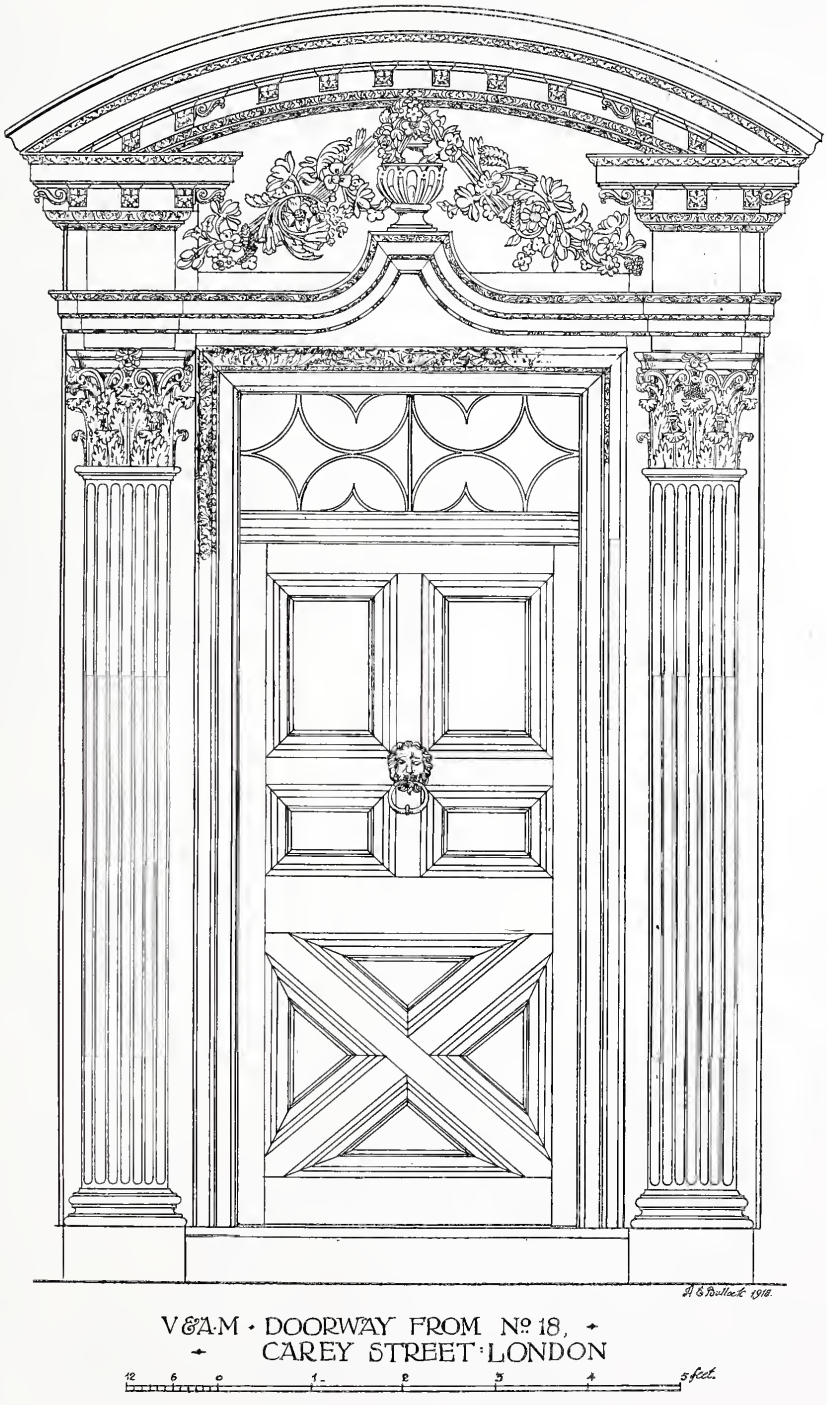
The erection of Chatsworth House for the Duke of Devonshire, by William Talman, was preceded by the building of Thoresby House, Nottinghamshire, by the same architect. The dignified nature of Talman's work remains a permanent testimony to the genius of this architect who, but for the notoriety of his contemporary—Sir Christopher Wren—would undoubtedly have been proclaimed the most renowned of his age. He gathered around him all the finest craftsmen of his day, whose work must have been subjected to an exacting scrutiny and supervision.

Although the Watson family were employed in carving the woodwork at Chatsworth for forty years, Samuel Watson's term of twenty-five years ceased with his death in 1715, and he was originally subservient to Thomas Young and Joel Lobb, whom he appears to have survived. Other carvers there included Robert Owen and William Davis, who are all recorded to have worked together upon the state rooms from 1692. Lord Exeter engaged both Young and Watson to work at Burley. It is interesting to compare the character of the work at Chatsworth with that at Ashburnham House of the previous period. The freedom in the carving in the lapse of fifty years is very marked, the staircase in each case being totally different in nature. The heavy wood balusters are—at Chatsworth—substituted for graceful wrought ironwork by Tijou, while the stone carving on the soffits of the landings and on the piers within the fountain court are very effective. (See illustration on page 426, May, 1918.)

The staircase at Hampton Court Palace is of similar nature, having wrought iron balustrading and stone steps, the landings being ornamental with hexagonal stone tiles.

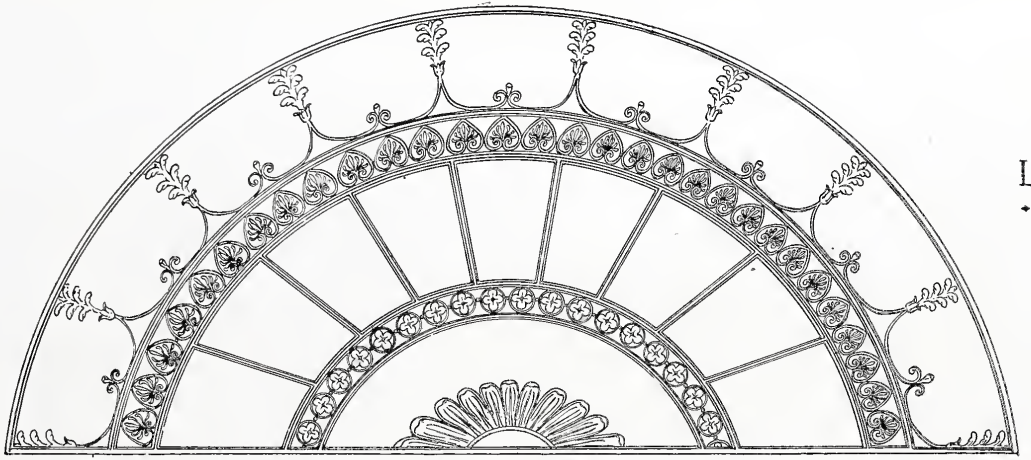
The practice of adopting variegated paving was of early origin, since the black and white marble setting to the Hall of the Queen's House, Greenwich,—by Nicholas Stone for Inigo Jones in 1639—is one of the interesting features of that royal residence. In the time of the Adam brothers the staircases were occasionally inlaid with hardwood, as at Clayton House, Buckinghamshire.

The Great Fire of London destroyed or damaged many of the City Livery Halls, which were subsequently reno-

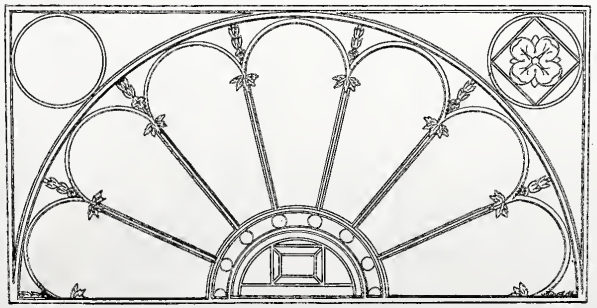


DOORWAY FROM 18 CAREY STREET, LONDON.
IN VICTORIA AND ALBERT MUSEUM, KENSINGTON.

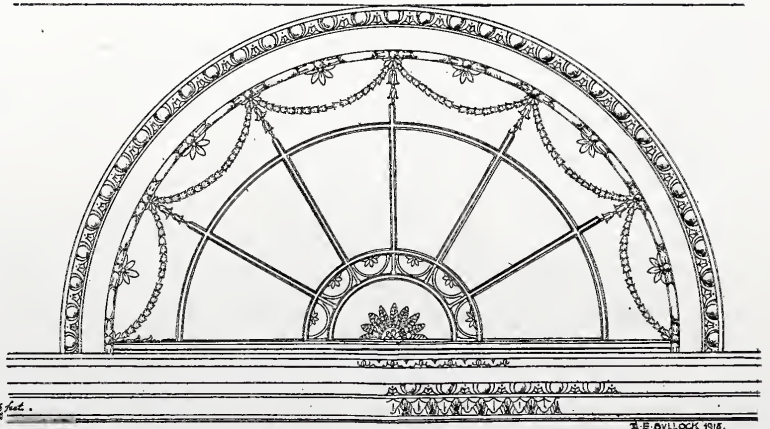
LATE · GEORGIAN · FANLIGHTS. ·



BOARD OF AGRICVLTVRE & FISHERIES.
· WHITEHALL PLACE · LONDON. ·



SVSSEX · HOVSE · WATFORD.



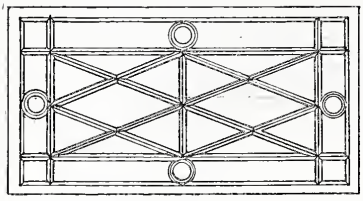
A·E·BVLLOCK 1918.

V&A formerly GT ORMOND ST · LONDON.

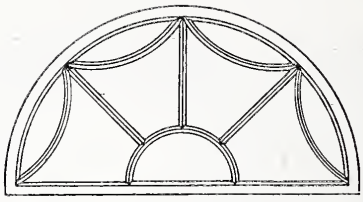


BANK FRONT : HIGH STREET : GUILDFORD.

ENTRANCE TO SWAN HOTEL,
LICHFIELD



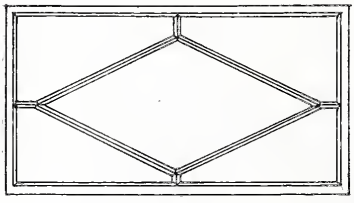
GVILDFORD



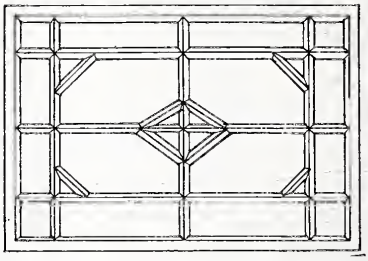
WATFORD: HERTS



SECTION



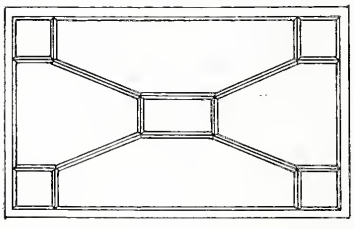
GLOVCESTER



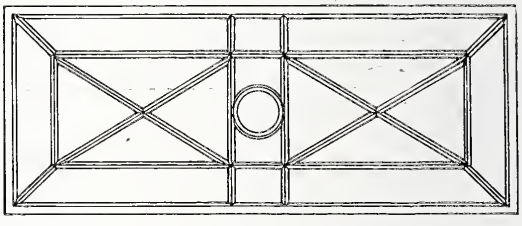
WEST STREET: GLOS^{r}



SECTION

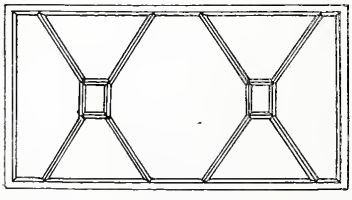


LICHFIELD

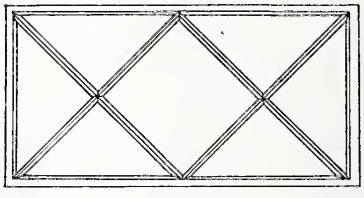


SVSSEX HOVSE: GLOS^{r}



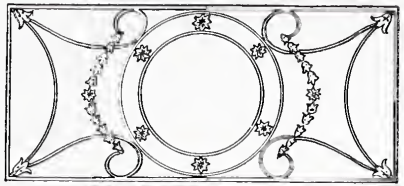


PARLIAMENT ST WEST^{R}

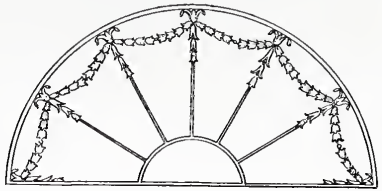


ESSEX

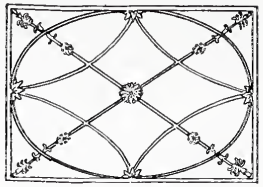
GLAZED WOOD
FANLIGHTS.



BATH.

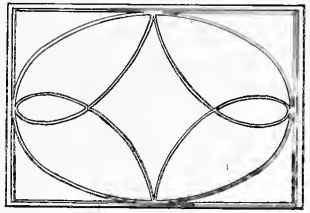


LICHFIELD.

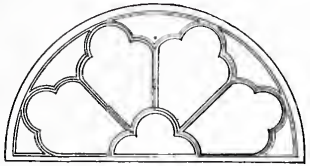


LAVRA PLACE : BATH

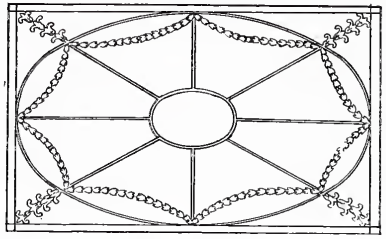
OLD LEAD · FANLIGHTS.



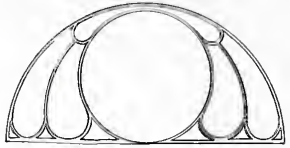
LICHFIELD



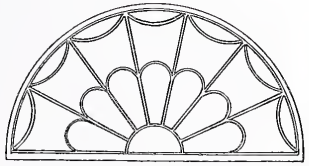
WARWICK HOUSE
ST JAMES'S PALACE



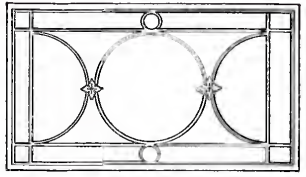
WATFORD



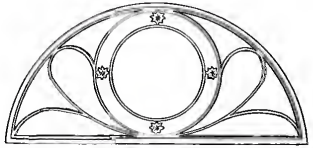
LOMBARD ST · LICHFIELD



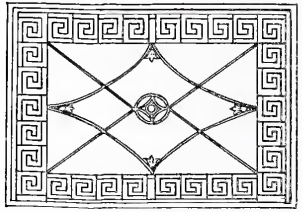
OLD GEORGIAN FANLIGHT
WATFORD.



212 HIGH ST WATFORD



HERTFORD



32 HIGH ST : HERTFORD



SCALE OF FEET

OLD LEAD
FANLIGHTS.

vated or rebuilt within a decade or two. The Brewers' Hall, Addle Street, the Hall of the Vintners Company and that of the Tallow Chandlers all contain interesting details of the work of this period with good wood carving and wainscoting distinguished by large panels having bolection moldings and enriched cornices. Both timber and craftsmen were occasionally imported from Holland, as was the case at Holyrood Palace, where Jacob de Wett and Jan Vansantvoort were engaged under the direction of Sir William Bruce and Robert Mylne in 1671.

In Surrey the Chapel of Farnham Castle possesses some good Charles II wainscoting and carving of the angelic and seraphic order, which became a typical feature in most of the ecclesiastical edifices of this age. Some of the work seems earlier, since composition has been used in places in lieu of carving, the work having been carried out in the latter half of the seventeenth century for the Bishop of Winchester.

Badminton House, Gloucestershire, contains examples of work from several different periods since its partial re-creation in 1682 for the Duke of Beaufort. The Jacobean oak room originally existed in Raglan Castle, Monmouthshire. The dining room possesses carving of the Grinling Gibbons School, while additions were made in 1740 by William Kent and Rysbrack, chiefly to the Hall and the East Room. The chimneypiece in the large drawing room is of the time of Flaxman, carved in a refined and delicate manner, in addition to which there exists a "Chinese" Room, where the Chippendale-Chinese style has run a free course.

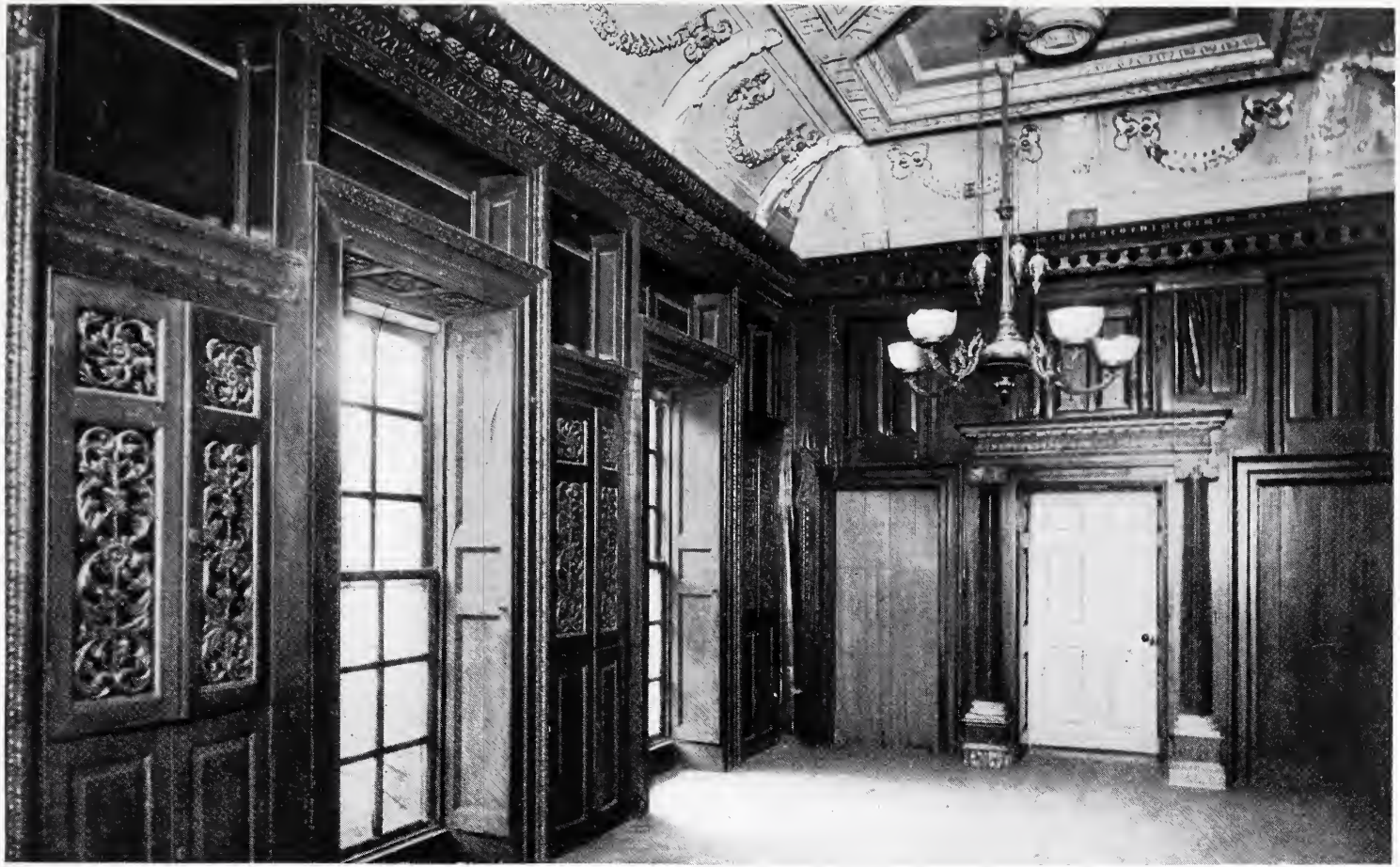
In the grounds of Badminton House is situated Worcester Lodge, designed by William Kent, where exists a ceiling by him, and formerly a chimneypiece with his usual consoles, now, however, consigned to the East Room of the Mansion. Great Badminton is slightly northeast of Dyrham Park, the seat of the Rev. Wynter Thomas Blaythwayt, M.A., designed originally by Sir John Vanbrugh (the architect of Blenheim Palace), for his ancestor, Sir William Blaythwayt, and both estates are north of Marshfield, on the Somersetshire border.

Gloucestershire contains several famous country seats, of which Stanway House, near Winchcombe, is of much interest. It was erected in 1626 for Sir Paul Tracey, and contains entrance gates reputed to be designed by Inigo Jones. It is now in the occupation of Lord Elcho. Near Cirencester is situated Barnsley Park, rebuilt about 1715 for Brereton Bouchier, who died in 1719, and whose daughter married Henry Perrot, who doubtless had additions made, since the rainwater heads bears the date 1721. The style is not unlike that of Easton Neston, which latter was erected by Nicholas Hawksmoor in 1702.

Hawksmoor followed the Wren manner in most of his work, and is said to have been responsible for the "Orangery," which is situated in Kensington Gardens near the palace, and was built early in the reign of Queen Anne. He is credited with work at Barnsley Park, Gloucestershire, where the decorations are more florid than one would have expected from an architect of his training.

James Gibbs, the architect of the Radcliffe Library at Oxford, built Ditchley House in the same county. This place contains some notable examples of art, certain chimneypieces being from the chisel of Sir William Cheere, the well known sculptor, who was a disciple of Scheemakers. Architectural drawings, monographs and literature were of frequent occurrence during the eighteenth century, and Gibbs, who was of Scottish descent, issued a monograph upon the Radcliffe Library, having in 1728 previously published his "Designs of Buildings and Ornament." Gibbs had a passion for ornament of bold character, whether carved in wood or marble or modeled in plaster.

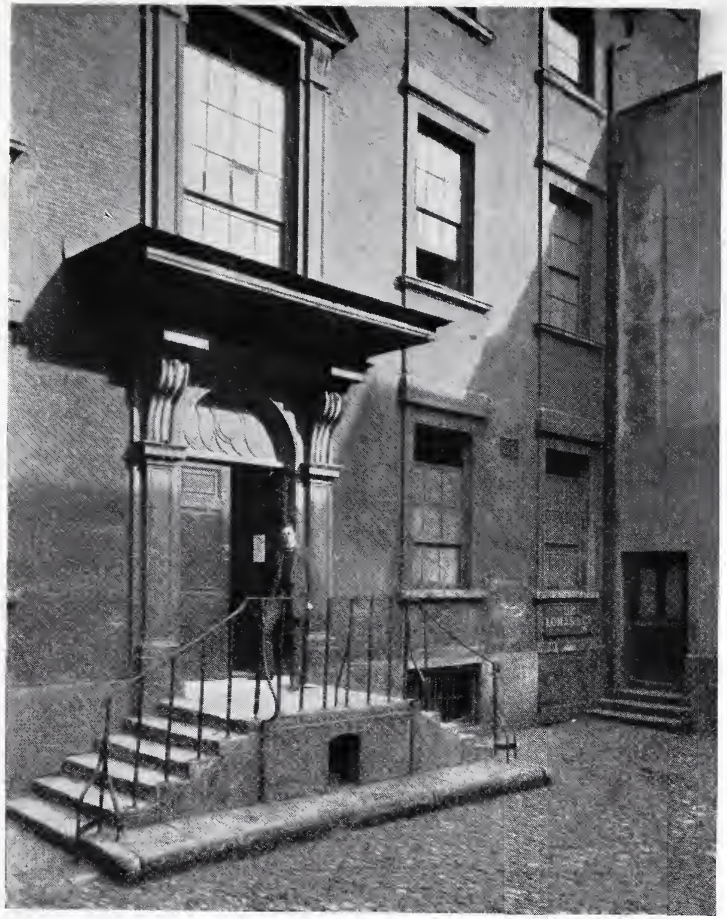
That versatile genius, William Kent, was responsible for some of the paintings at Ditchley House, and probably designed the benches in the Hall, as also the chimneypiece executed by Stanton and Horsennaile. The Italian plasterers, Serena and Vassali, modeled the plaster work of the saloon, while the green draw-



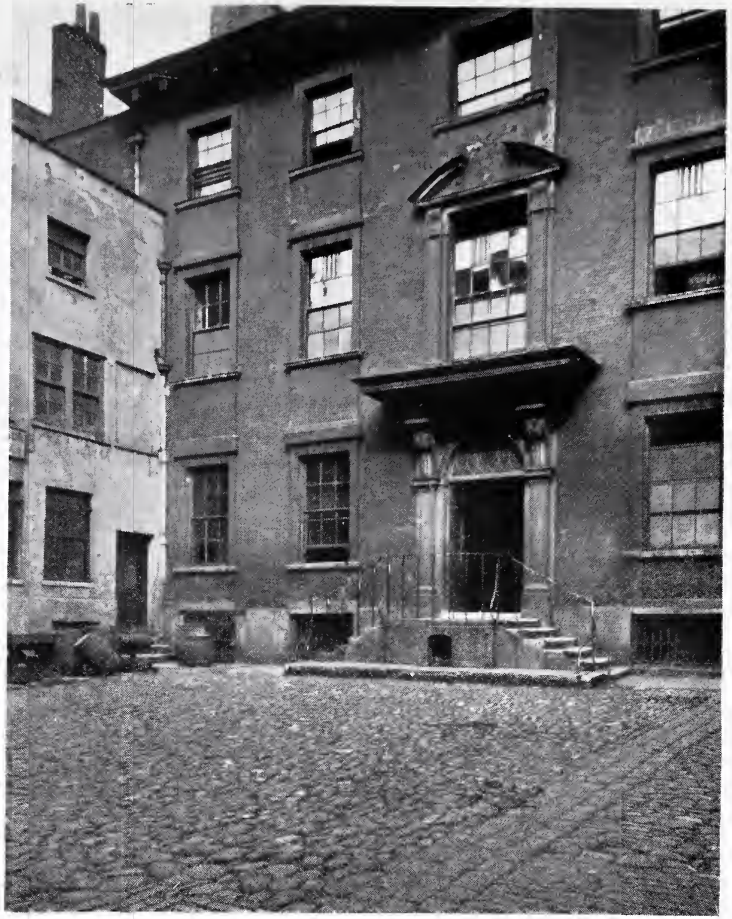
CHIPPENDALE ROOM, SUDBURY. SOLD TO AMERICA.



GREAT MARBLE DOOR ON LANDING, CHATSWORTH, DERBYSHIRE.



DETAIL OF ENTRANCE—THE WARD SCHOOL, LOVE LANE, LONDON, E. C.



COURT FRONT—THE WARD SCHOOL, LOVE LANE, LONDON, E. C.



GEORGIAN HOUSE AT
YEOVIL, SOMERSET.



OVERDOOR FROM 27 HATTON GARDEN. IN VICTORIA AND ALBERT MUSEUM, KENSINGTON.

ing room decorations are for the most part of Louis XV. character.

Kent was an earnest student of architecture, sculpture and painting, having visited Rome with the younger Talman in 1714. In company with Flitcroft, Isaac Ware and others, Kent published his "Designs of Inigo Jones" in 1727 at the expense of the Earl of Burlington. He made his third visit to Rome three years later, and became, by virtue of his ability, much sought after by the nobility of his age, who even asked his advice in matters of taste in dress and attire. One of his chief works was Houghton Hall, where Rysbrack and Artari were much employed. Kent adopted many features of ornament practised by Inigo Jones, the staircase at Houghton being on the model of that at Coleshill, while much of the plaster work at the Treasury Offices executed during Kent's period of supervision is based upon Jones's work at the Queen's House, Greenwich.

Kent was associated with Ripley in the building of Wolterton, and executed much of the designing for Lord Burlington's villa at Chiswick.

Holkham Hall is the result of the combined efforts of the Earl of Burlington's school, and is more severely classical than any of the foregoing.

One of the most useful publications of this age is "Vitruvius Brittanicus," by Colin Campbell, which illustrates scale drawings of the plans and elevations with certain interiors of the most notable buildings standing in England at this time.

Reference has been made to the publications of Chippendale and the joiners of his era, which were followed by many works on objects of art, ornaments, chimneypieces, etc., by Pergolesi, Columbani and others, and one on ceilings by George Richardson, a student of, and assistant to, the Adam brothers, who themselves caused their work at Sion House to be published in a large folio book of fine engravings.

The entrance doors of the latter half of the eighteenth century are of particular interest, and form one of the most absorbing studies in many of the chief towns in England, such as London, Salisbury, Yeovil, Exeter and many similarly

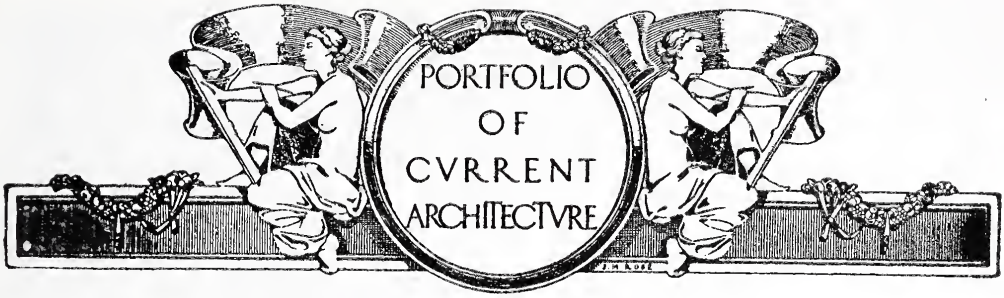
important centres. Several good examples are preserved intact at the Victoria and Albert Museum, of which I give a measured drawing from that formerly at No. 18 Carey Street, London. The wrought iron overdoor will be noticed for its simplicity of design, many variations of which are to be seen in rural districts and the Midland towns. They are frequently in wood, metal or lead, sometimes being in a combination of several metals. The play of design and great variety will be gathered from the few examples here given, drawn from hurried sketches made during my tours around England, chiefly, however, culled from doorways in Middlesex, Essex, Hertfordshire and Staffordshire. They are not measured in every case, but the general proportions are maintained, and will be found a satisfactory guide to the principles adopted in olden days.

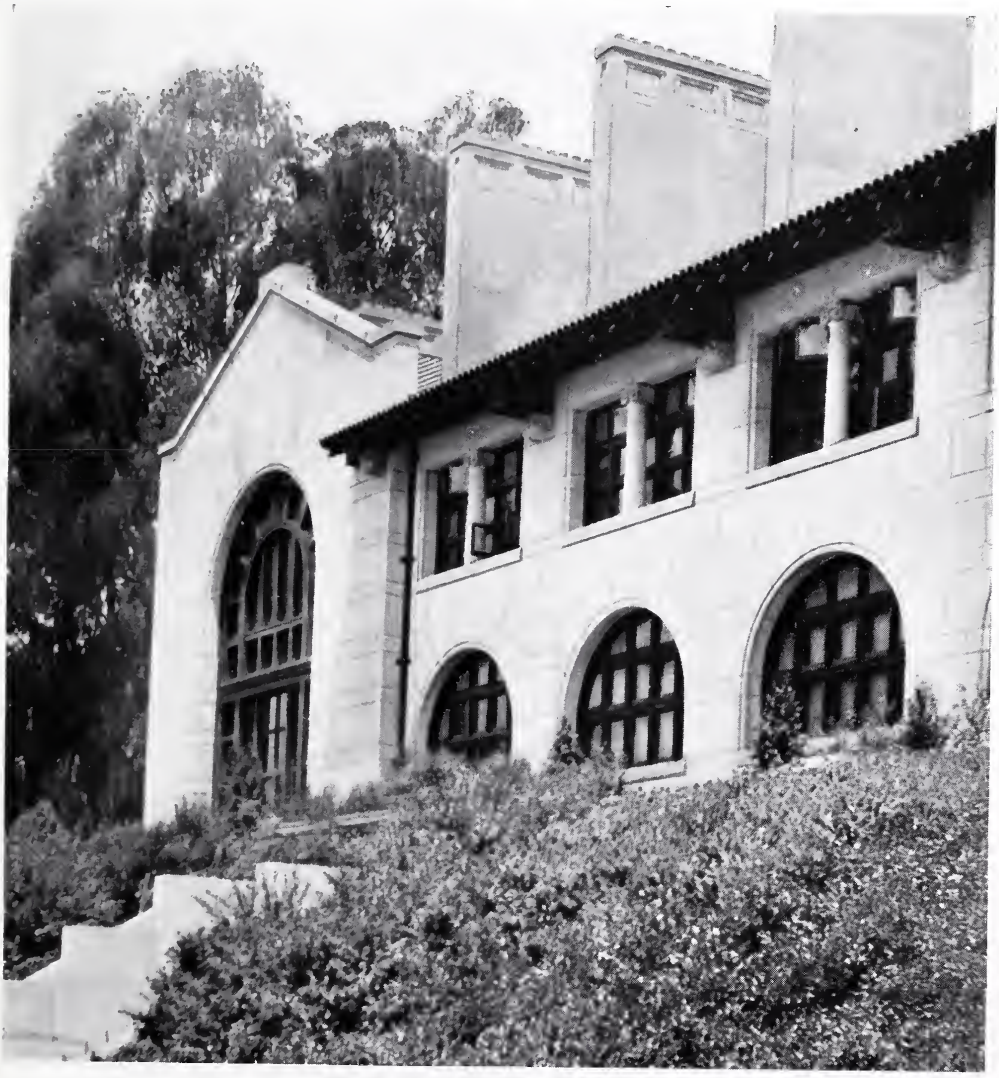
The glass of the fanlights was not always cut to the shapes shown, some of the ornament having broken away revealing this fact. For the most part, however, old examples had a rebate for glass on each side of the bar or certainly to all the main bars in the design.

The Adam examples were very delicate in construction and decorative in design, frequently having festoons of beaded or husked ornament incorporated in the pattern. The wood types were necessarily more simple, except in the case of the example from the Guildford Bank, which also has a prototype in the example from Lichfield.



THE HALL IN FORDE ABBEY. BY INIGO JONES. CHARLES I. PERIOD.





HEARST MEMORIAL MINING BUILDING, UNIVERSITY OF CALIFORNIA. JOHN GALEN HOWARD, ARCHITECT.



NORTH AND WEST FRONTS—HIGH SCHOOL, SOUTHAMPTON, L. I.
William Lawrence Bottomley, Architect.



WEST WING—HIGH SCHOOL, SOUTHAMPTON, L. I.
William Lawrence Bottomley, Architect.



NORTH FRONT—HIGH SCHOOL, SOUTHAMPTON, L. I.
WILLIAM LAWRENCE BOTTOMLEY, ARCHITECT.

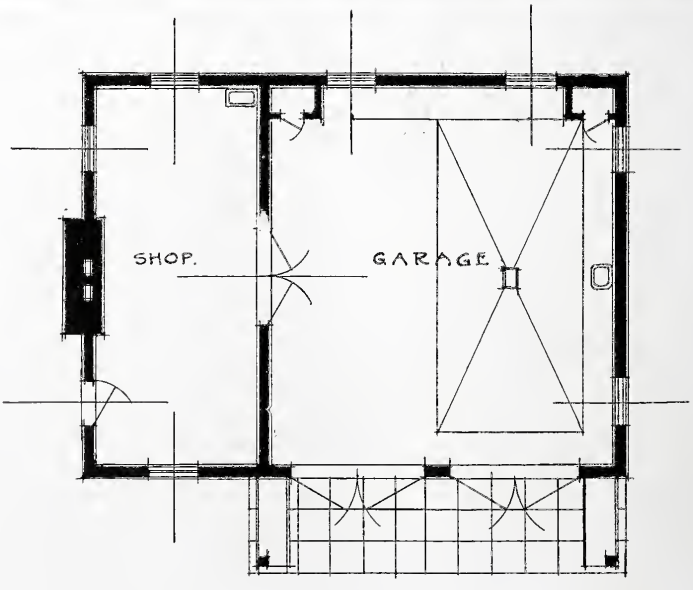


PAULINE CHAPEL, COLORADO SPRINGS,
COL. THOMAS MAC LAREN, ARCHITECT.

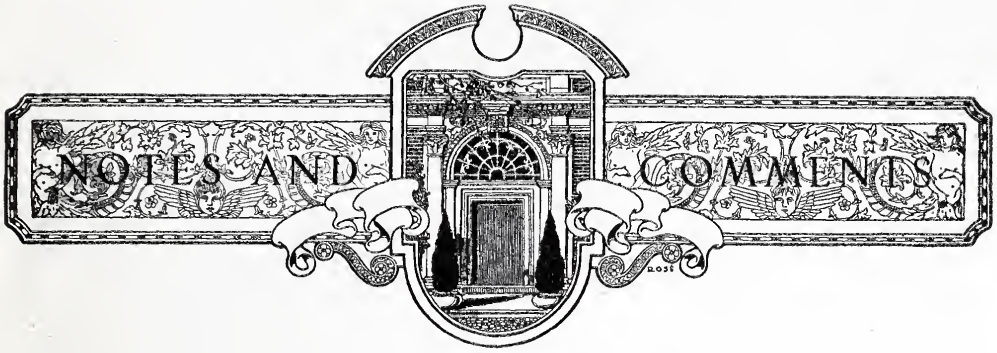


PAULINE CHAPEL, COLORADO SPRINGS,
COL. THOMAS MAC LAREN, ARCHITECT.





GARAGE OF MRS. SARAH B. HALLADAY, ENGLEWOOD, N. J. CARETTO & FORSTER, ARCHITECTS.



A Civic Art Library for New York City.

The nation-wide interest in war memorials and the need for advice as to what architectural form or forms are most fitting and most expressive of American ideals, has demonstrated the need for greater attention to the aesthetic development of the American municipality. Daniel Burnham long since implored us to "make no little plans" as "they have no magic to stir men's blood"; and Mayor Meredith P. Snyder of Los Angeles has recently pointed out that "there is a spirit abroad to make cities beautiful as well as bigger." Interest in war memorials has brought forth suggestions and recommendations from the American Federation of Arts, the National Committee on Memorial Buildings (changed to Bureau of Memorial Buildings of the War Camp Community Service), the United States Commission of Fine Arts, the American Civic Association, the Municipal Art Society of New York, the American Forestry Association, and numerous other civic organizations. War Memorial reference lists and bibliographies have been compiled by Mr. Frank Weitenkamf of the New York Public Library (See Architectural Record, September, 1919), by Miss Theodora Kimball of the Library of the Harvard School of Landscape Architecture, and others. But despite all this activity there is little evidence that any considerable endeavor is being made by purely municipal agencies to build up a comprehensive collection of literature and information concerning the important subject of civic art in its various relationships.

In New York City, however, a nucleus for a library of Civic Art is now being formed as the result of a cooperative agreement made recently by the Municipal Art Commission and the Municipal Reference Library. The new library will be known as the Civic Art Division of the New York Municipal Reference Library, and it will be located in the Art Commission chambers on the upper floor of the old City Hall building.

The Art Commission of the City of New York when it was established in 1897 under the Greater New York Charter was "practically a new departure in municipal government in the United States," for although Connecticut had organized a State Capitol Commission and Boston (1890) and Baltimore (1895) had made provision for Art Commissions, the last two were only in the experimental stage, as they were not yet accepted as integral parts of city government. Lacking American experience as a guide in planning and organizing the work of the Commission it was decided to make a study of the practice in European cities, many of which have departments to pass on the artistic quality of designs of monuments and buildings. Mr. Milo R. Maltbie, Assistant Secretary to the Commission, was therefore instructed to visit the principal European cities, study their art departments and collect data and information to guide the New York Commission in its work.

In his report, entitled "Civic Art in Northern Europe," published upon his return in 1903, Mr. Maltbie enumerates the cities visited and he states further: "Maps, plans, photographs, books and pamphlets relating to city embellishment in its many phases were secured from each city, which form as complete and as comprehensive a collection as exists upon this side of the Atlantic." The collection, in Mr. Maltbie's opinion, "when classified and thoroughly indexed, should be of great usefulness, not only to city officials but to artists, architects and private individ-

uals interested in city embellishment."

The literature collected by Mr. Maltbie has since been added to from time to time until in 1916 the collection comprised some one thousand volumes, as well as a collection of one thousand photographs of views in American and foreign cities, dealing chiefly with civic improvements. Photographs of old New York buildings were subsequently obtained and added to the collection. Some attempt had been made to classify and index the collection, but this work was retarded because of insufficient clerical assistance.

Shortly after his appointment to the office of Assistant Secretary Mr. Henry Rutgers Marshall discussed with the Municipal Reference Library the matter of the establishment of a branch library devoted to Civic Art, to be located in the Commission's offices. This step appeared to be advisable because the Municipal Reference Library was purchasing all outstanding books on Civic Art while the Commission's funds for the same purpose were inadequate. The following agreement was therefore drawn up:

1. That the Art Commission deliver to Dorsey W. Hyde, Jr., as the Librarian of the Municipal Reference Library, all books in the Library of the Art Commission which it considers inappropriate to its present uses; these to be added to the Municipal Reference Library, or to be disposed of otherwise as may seem best to the Librarian.

2. That, on the other hand, Mr. Hyde, as Librarian of the Municipal Reference Library, turn over to us such books relating to Art as are now in his charge; and that the Library of the Art Commission be thereupon constituted a branch of the Municipal Library to be devoted to the subject of Art.

3. That the Municipal Reference Library make a new catalogue of the Library of the Commission as thus newly constituted, and furnish the Commission with a duplicate of the same for its use; and to keep this new catalogue up-to-date.

4. The Municipal Reference Library further agrees to consult the appointed representatives of this Commission in relation to the purchase of books on Art; and also to purchase, from time to time, books which may be recommended by the said representatives, provided he approves of the selections made and finds funds available for such purchases.

In accordance with the above plan a Civic Art Division of the Municipal Reference Library has been created and the work of consolidating the art collections of the two institutions is now in progress. A classification scheme is being worked out and a complete index prepared. Index cards will be duplicated in the index of the Municipal Reference Library in accordance with the plan already followed for the books of the Public Health Division. At the suggestion of the Municipal Art Society the advisability of publishing a catalogue of books and literature on Civic Art is now under consideration.

DORSEY W. HYDE, JR.

Model Group of Farm Buildings in Miniature.

Students of the Nebraska College of Agriculture are aided in their work to master the problems of farming by means of a model farmstead in miniature which is a part of the equipment of the Agricultural Engineering Department of the College. The buildings comprising the model were designed and constructed by students of the Department, and include a comfortable farmhouse, set on a concrete foundation and equipped with modern conveniences; a dairy barn with a solid-wall concrete silo; a hay shed for alfalfa; a horse barn; a hog house; a tool shed and shop, a poultry house and a machine shed. The entire model was built to one-quarter scale, the materials from which the buildings were constructed being cut to this scale in the woodwork shop of the College.

This model, or "Nebraska farmstead No. 1," as it is called, represents a nearly ideal arrangement for a 160-acre farm in the prairie states. The plan was worked out for one particular farm, and has been tried out on farms in several counties of Nebraska. Many points were given consideration in planning the farmstead to make it practical and at the same time comfortable and pleasant.

The barns and yards are east of the house so that unpleasant odors are carried away by the wind, which, in Nebraska, usually is south and southwest in summer, and north and northwest in winter. The house is on high, well-drained land, which insures a good view and prevents barnyard drainage from reaching it.

All of the buildings are so located as to act as windbreaks to adjoining yards, nearly all the fences serving two yards. The yards are adjacent to the pastures and the

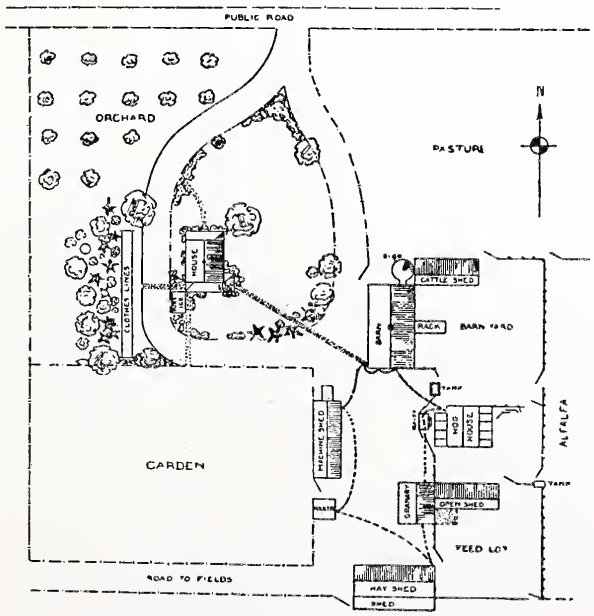


THE MODEL FARMSTEAD IN MINIATURE.

garden is close to the house. The farm scales are so situated as to be handy for weighing grain and stock, and it is possible to drive to nearly all of the buildings without opening gates.

Each building in this arrangement is planned so as to house sufficient feed for stock in adjoining lots. Thus, unnecessary walking is eliminated, and the man who does the chores has only to follow a general path around the group of buildings, as shown by the dotted lines on the plan of the farmstead.

When a man starts doing chores in the morning he goes from the house to the barn, where he tends the horses, colts, cows and calves, separates the milk and feeds the calves. He then takes the re-



PLAN OF THE MODEL FARMSTEAD.

maining skim milk to the pigs at the farrowing pens, and goes to the combined crib and granary to feed the fattening hogs and fat cattle. In returning he passes to the hay shed and feeds the stock cattle and then the poultry. He steps into the milk-room at the barn, gets his cream, returns to the house, and the chores are done. He has walked only 750 feet. When two men are doing chores, one goes to the barn and one takes care of the outside stock.

Suppose it is evening and the farmer is coming through the lower gate by the hay shed. His course to the barn leads past nearly all of the buildings, and most of the chores can be done while the team is reaching the tank, drinking and going to the barn. When the horses and cows are attended to, the chores are done.

Factory managers save thousands of dollars each year by devising methods of saving labor, but very little attention has been given to the arrangement of farm buildings so that farm operations can be made efficient. Yet one-fifth of the value of all farm properties is invested in buildings. Actual observation has shown that proper arrangement of farm buildings in many instances saves one mile of walking every day, or three hundred and sixty-five miles per year. ROBERT H. MOULTON.

Albany Business Men Oppose Commercial Type of Public Building.

Efforts are being made in Albany, N. Y., to prevent deterioration in the surroundings of the Capitol; and it is interesting to note that the movement is supported primarily by business men, under the leadership of the Albany Chamber of Commerce, who are urging the Legislature to vote down the proposed construction of a ten-story office building just east of the Capitol, on a corner opposite the new Education Building, which flanks the Capitol. The height and shape of the intended structure would clash with the lower proportions of the Capitol and, particularly, with the fine long colonnade of the Educational Building. The unwisdom of this scheme is emphasized when one realizes that on the other front of the Capitol a like sky-scraper, built by private interests, gives too evident proof of the damage that will be done. Quite correctly, the Chamber of Commerce wishes to see the proposed office building similar in design to the Education Building, balancing it, and thus making a splendid group of three public buildings, rightly placed and worthy of the government of the Empire State. It is further desired that the small square block of land in front of the Capitol, enclosed by this properly designed group, be made a little park or plaza, either entirely open, or else containing a screen of columns in the form of a war memorial, this memorial making the fourth side of the square. The State has bought this small block; and, now that the buildings in it have been razed, one sees revealed the fine silhouette of the Capitol as viewed from the east, together with the splendid colonnaded proportions of the Education Building hitherto blanketed by business buildings. This square, therefore, should be kept as open as possible.

The proper planning of Albany has long been under consideration ever since Mr. Arnold Brunner and Mr. C. D. Lay reported on the city plan of Albany in 1911. Since then three successive State architects, Messrs. Ware, Hoefer and Pilcher, have worked on the scheme of the Capitol surroundings. The Chamber of Commerce has adopted their ideas, and it is to be hoped that the Chamber will succeed in its public spirited aim to prevent the depreciation of the millions of dollars that the tax-payers have put into fine architecture of their Capitol buildings. And not only in regard to this attempt. Further raids will doubtless be made. Still, the American people are gaining in appreciation of open air majesty and of the worth of fine architecture. Each year it becomes easier for public spirited citizens to do their duty as guardians in defense of public property against material damage. The thanks and support of architects will go out to the Albany Chamber of Commerce.

JOHN TAYLOR BOYD, JR.

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